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Green Growth in Two Differentiating Planning Systems

A Comparative Study on Green Growth in Norway
and South Korea

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Preface

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Abstract

Today's globalisation has brought about legal and binding international obligations. International organisations are formulating policies to be implemented by member nations. Some obligations are legally binding, while others are not required to follow. A state is the sovereign power and has the choice to sign or discard it.

International policies with relevance to land use planning will most likely play a greater role in the coming years. How are international policies reflected in a planning system, and how is this shown on a land use plan?

This thesis attempts to shed light on the how a planning system is structured to implement an international policy regarding green growth that Norway and South Korea has accepted, and in what way it can be seen on the local level. The public administration may have to undergo changes in order to implement an international policy unless the nation has the tools and institutions to carry out the policy.



Part I

1.1 Planning Act as a system for international conventions and agreements

How does the Norwegian planning and building act contribute to the “implementation” of international conventions and agreements? (“Planning and Building Act,” article 3-1 (4))

In article 3-1 (4) of the planning and building act of Norway it is stated that “plans shall contribute to the implementation of international conventions and agreements within the scope of the Act” (“Planning and Building Act”). The world is in constant growth and has become more globalised. On the European continent there have been initiatives to discuss a more organised planning system in the countries. Through comparative analyses of the member nations planning systems they investigate the differences and similarities. However, through international conventions and agreements, member nations become more similar by implementing these policies. In that sense, I believe it is important to analyse the current planning act of Norway to see in what ways it is conform to the international conventions and agreements we have ratified. First, we will take a look at the purpose of the planning and building act before we analyse article 3-1 (4) from the planning and building act.

The first paragraph of article 1-1 and purpose of the planning and building act is to “promote sustainable development in the best interests of individuals, society and future generations.” Both the committees behind the establishment of the act were in agreement about the fact that

sustainable development must be an overall goal. The necessary clarifications of interests should be conducted from a futuristic perspective where all the significant interests and needs which the act should fulfil are considered. The purpose does not only stress the importance of consideration to the community interests, but also for the individual in a long term perspective. The term sustainable development in the act is taken from the definition which is stated in the report from the World Commission on Environment and Development held in 1987. It is as follows: “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Regjeringen, 2008a, p. 170). The Norwegian official (NOU) report 2003: 14 discusses the meaning of the term ‘sustainable development’. They define it as something which includes the promotion of e.g. value creation, employment, conditions for good housing, living environment and childhood environment. The first article of the act makes a reference to article 3-1 about planning functions and considerations for more specified information and elaboration in consideration to land use plans (Regjeringen, 2003, p. 240)

While article 1 of the act is in the general part regarding the act, article 3 is in part two where the planning part is presented. As before-mentioned article 3 presents the functions and considerations in planning. In the fourth paragraph of the third article we find the text “plans shall

contribute to the implementation of international conventions and agreements within the scope of the Act” (“Planning and Building Act”). New international conventions and agreements related to the planning and building act are constantly introduced, and there is a need to regulate them by law. Consequently, the planning and building act has introduced this statutory provision in order to emphasise that Norway has international obligations in fields connected to the act. A great number of these obligations should be safeguarded completely, or partly through the act and through its application. Not only do some international agreements have significance for what can be legally approved, but also for the interpretation of the articles in the act. It is however important to note that the national government has the sovereign power to this day. There are no fully developed supranational governments, yet the European Union has some regulatory power in some areas. Several international laws have direct or indirect significance with regard to the rules for land use and resource management. For instance, United Nations convention of 1966 art. 28 about the civil and political rights is of great importance for the protection of Sami culture, economic activity and social life. Other examples include the convention on biological diversity of 1992, the convention on the rights of persons with disabilities of 2006 and the monitoring of the European landscape convention of 2000 (Regjeringen, n.d.). Especially the European landscape convention has made the term landscape

more visible in the act, and planning processes should highlight the consequences of landscape change (Regjeringen, 2008a, p. 42).

In order to analyse how the Norwegian planning and building act contributes to the “implementation” of international conventions and agreements, this text will discuss one such convention or agreement and see how it is implemented in national and local context. The research question below will give a broader picture of this.



1.2 Background

International conventions and agreements have had a great importance up through the years, and still have to this day. Intergovernmental organisations such as United Nations, European Union, World Bank, OECD have played a central role in coordinating and exchanging information between nations around the world. Through these organisations, countries can learn from each other and establish common values and set that as a standard for pursuing better environmental, sustainable or other policies. They act as international governments, however their impact on countries' policies may not be of huge importance to each nation as demands of fulfilment have often been loose in agreements and conventions. The matters discussed and the policies in these organisations have then often been implemented directly, indirectly or vaguely. In what way and what degree do these conventions and agreements reflect themselves in member nations of the specific organisation? More specifically, how do these affect certain professions' practice such as land use planning in Norwegian governmental institutions?

International conventions and agreements most certainly affect member nations to some degree, but in what way does the national government pass this on to the local levels of government? In Norway the local government in the different municipalities play a key role in coordinating the national policies and how land use planning should be practiced. However, they are autonomous in the sense that they can make their own decisions without much interference from the national or regional government. In order to look at Norway from a broader perspective it would be interesting to compare with another country and investigate how they have implemented the same convention or agreement. I have selected the Republic of Korea, a country located far away from Norway with a different culture, history and which has developed in a different manner. This will contribute to shed light on the differences and the significance of the globalised era we are living in. Moreover, it will be easier to see similarities and differences, and perhaps which of the two nations have a better implementation of the agreement into the field of land use planning.

This paper will look at one matter which has caught interest in many of the major intergovernmental organisations. This is the work on Green Growth by organisations such as the UNEP, OECD and World Bank. More specifically, the OECD convention, OECDs work on green growth and how it has been implemented in member nations will be of utmost importance. The term Green Growth was especially a hot topic after the financial crisis occurred. One nation, the Republic of Korea, realised they had to counterattack this crisis to reduce the damage, and they did that by the introduction of a Green Growth strategy. Both Norway and South Korea are members of OECD and by investigating two nations with a different culture, history and location we will be able to clarify differences and the significance of the age of globalisation.



1.2.1 Research question

The previous section explained that many renowned organisations have taken an interest in the concept of green growth. The OECD has stated green growth as one of OECD's main objective goals. OECD's green growth strategy is however no convention or agreement in regard to the provision in the Norwegian planning and building act. It is a declaration which is not intended to be legally binding, and therefore no formal adherence to the declaration is required (OECD, 2009, n.d.-d).. However through the ratification of the OECD convention member states have committed themselves to strive towards the implementation of policies prepared by OECD unless they abstain from it when it is adopted. Then, what is it about this topic that might be interesting to research?

This paper is directed towards the field of urban planning. The current Norwegian planning and building act introduced a norm that relates planning practice to policies that are formulated on an international level. This is the first time in the history of Norwegian planning legislation that the law and the practice of planning refers to something superior to the sovereign level of the state. With today's ongoing globalisation processes, this is likely to be an emergent phenomenon in our national planning culture, and as such it is important to reflect upon its implications.

The scope, then, is to see how a national planning system, the Norwegian one in particular, starts to

adapt to international and supranational policies in order to facilitate their implementation in national contexts, and how this tendency mutates the frameworks and influences the practices of planning. To get back to our theme of OECD's green growth policy, the following material will focus on how this specific policy is reflected in the end product of a planning process. This paper will therefore discuss how OECD's green growth policy is reflected in the two state's land use plans. The two states that will be discussed are Norway and South Korea. The provision stated in the Norwegian planning and building act has been the main interest and reason for this study. However, South Korea was the first state to formally introduce the green growth concept. The main question deriving from this brief discussion can be summed up as follows:

How is international policy concerning green growth reflected in two differentiating national planning systems?

This is the research question we will investigate, through a comparative study of Norway and South Korea. A research question gives a hint of what the research will be about, but does not provide a clear picture of the topics that will be discussed in order to get a holistic view of the processes which has led to the production of the land use plans. Thus, four partial research questions have been set which will help to provide more detailed information, the first in line being:

1. How is the planning system designed as an institutional technology to implement an international policy?

The first question includes explaining the functions of the planning system as a technology that a state has put in place in order to implement policies related to land use, and in this particular case an international policy, which is a phenomenon that we will probably see more of in the future. A planning system is connected between different levels of governments. As the concern here is about the implementation of an international policy, we need to investigate how the central government committed to this policy relates to the lower levels government. In this case the question is how the OECD's green growth policy is managed at the national level in the two countries, and how this policy is being implemented in the lower levels through the planning system. We will look at where power is located in the planning process, the planning instruments, and thus in the practice of planning. Thus another subquestion is necessary:

2. Which role does green growth play in the national policies of sustainable development?

This second subquestion has the aim of analysing what role green growth policy play, as a means of achieving sustainable development, in the already existing national policies of sustainable development. What is the cost of green growth reforms?

The picture may be quite different in the two cases. Norway has a long history with the use of policies related to sustainable development; South Korea has had sustainable development as a central focus for several years but has now introduced the concept of green growth which has more or less taken its role. Consequently, we need to look into sustainable development policies that exist in the two nations. In countries which already have a developed sustainable policy, with its control functions and institutional arrangements, implementing green growth may look more like a conformity process on an international level, where they might just as well be comfortable with seeing their own premisses being accepted by others. This seems to be the case in Norway, while in South Korea their introduction of the Green Growth policy seems to have had a greater impact, and has been used as a reform concept. The question then is what policies we find in the national policies which may be conform. The reason for the establishment of the green growth and sustainable development concepts, and the correlation between these two concepts will be analysed. Then, when an overview of the existing policies of each case is provided, a third subquestion can be made to continue the inquiry:

3. What changes or reforms have been made in public administration in order to adapt to a policy for green growth and facilitate its implementation?

On the background of what the two cases looked like in terms of sustainable policy and management when Green Growth was introduced as a concept, the third subquestion deals with changes in public administration, or more precisely, if and how it has been altered in order to adapt to the green growth policy. The important discussion regarding this question will be whether we can find new innovative elements which have been established in order to adopt the policy. This includes new arenas or committees with a role in planning processes, planning functions such as land use categories or zones requiring special consideration. Then a last subquestion can be formulated, which points back to the main question and closes the circuit:

4. How is the OECD's Green Growth strategy represented in the planning products of the two cases, Norway and South Korea?

The last question has the aim of analysing how the Green growth strategy developed by OECD is conform with the Norwegian and South Korean planning systems. Again, answering this question may help us understand the implications of new provisions of international or supranational policies in our planning system. The question directs us back to the discussion on how the OECD's green growth policy is reflected into the national policies of the two states in question, on the basis of proof i.e. findings of elements conform to the OECD's Green Growth policy in the planning systems.



1.2.2 Relevance and timeliness

The Norwegian planning and building act of 2008 has a new statutory provision which has not been present in older editions. The statutory provision states that, "plans shall contribute to the implementation of international conventions and agreements within the scope of the act" ("Planning and Building Act," Section 3-1 (4)). The Norwegian government has thereby started to relate to something above the national government. Not as something which is of higher value than the state, but because the government has committed themselves to follow these conventions and agreements. Implementation of several conventions and agreements have been occurring for many years, and is in that sense not so interesting. However, the planning and building act is the main regulatory tool for city and regional planners, and it is thereby interesting to investigate how these policies are implemented into the field of planning. The new statutory provision gives the planner a new dimension to consider which was not regulated before. Supranational governments with regulative policies will most likely get more attention in the coming years as we are living in a more and more globalised world. Especially huge global issues such as sustainable development is something which has to be tackled on the global arena.

It is important for the reader to note that the green growth policy is neither a convention nor an agreement, it is a declaration by OECD to work in that field. Nevertheless, article 1 of

the convention explicitly states that its work is to promote policies, and therefore through the ratification of the OECD convention, members are encouraged to cooperate and contribute to the aims of OECD. Moreover, members become subject to the twenty-one articles listed in the convention, although none of these are strictly mandatory and binding. The OECD's green growth policy is focused on providing policy advice which is targeted to the needs of (primarily) member countries, but does not require any formal commitment from its members and therefore no sanctions can be forced upon the countries which do not adhere. Although the convention has no formal regulatory power, Norway and South Korea through the ratification of the convention have political interest to commit to and strive after the goals OECD is working toward. Through the research on green growth we will be able to see how these two nations have adapted a supranational strategy.

1.3 Delimitations

The paper discusses how an international policy is conform to two national planning systems and how it appears in the land use plans of these countries. I will however not give a detailed explanation of each and every green growth indicator I am able to find in the respective plans. This would be rather time consuming and unnecessarily detailed for answering my research question. The history of the two nations will not be explained in great terms, there are several books which can explain this thoroughly to the reader. Green growth is a concept which includes several different disciplines, the paper attempts to presents the concept's relation to city planning.

Some important factors regarding the limitations are also noted below.

1. The paper will not look at the juridical implications regarding the international policy or the procedure of the implementation of the green growth from OECD to the national level.
2. The paper is restricted to the mapping of change that has been made to the policies of the two different states Norway and South Korea.

3. The analysis is based on specific criteria which bring the planning system and policy together. In order to measure green growth in the two countries, green growth indicators developed by OECD are utilised.
4. Moreover, the land use categories or zones requiring special consideration explicitly shown in the local land use plan and the Norwegian municipal plan are used as an additional indicator for the investigation.

1.4 Structure

Part I

Discusses the essence and meaning behind the paper and gives a brief introduction to what the research is about.

Chapter one gives an overview over the background and the reason as to why this paper was created. It also gives information about what the paper will focus on and what it will not go deeply into. Although it is not extensive it should give the reader the possibility to understand the main purpose and topic.

Chapter two should give an explanation of the different expressions, terms and theories connected to green growth and planning systems in the two countries. It explains what method has been used in order to conduct the research. Moreover, it shows how information has been collected and used.

Part II

analyses recent land use plans of Norway and South Korea related to green growth in Norway and South Korea. This includes a research of how and whether the green growth term is a part of the two countries. We will also look at the geographical, political and social situation of both countries.

Chapter three attempts to give an overview over conventions and agreements with relevance to the term green growth discussed in chapter two. After having investigated some of the relevant conventions and agreements, the OECD's green growth policy is chosen and creates the base for the further research of this paper. In order to measure green growth in these two countries a framework developed by the OECD is used.

Chapter four presents the land use plans that are to be analysed in the text. The land use plans are then analysed by the use of the framework developed by OECD.

Chapter five and six discuss green growth in relation to the two countries. First, we analyse if and where we find green growth in Norway. The laws, strategies, governmental reports and the ministry of environment is especially investigated. Second, Korea is analysed in the same manner as Norway, but with less focus on governmental reports.

Chapter seven and eight provide us with more general information about the two countries public administration; geographical, political and social functions. It also explains history of importance for the research.

Part III

Analyses the whole thesis and looks at the similarities and differences before pointing out how the international agreement has been implemented in the two nations.

Chapter nine includes an analysis of the descriptive information collected in the previous chapters. In this chapter the two countries will be compared and analysed together

Chapter ten discusses the findings of the research and the importance of the international agreement for the two nations regarding their work on green growth in land use planning.

2.1 Theory

The research focuses on how an international policy about green growth is represented in land use plans in the Norwegian and Korean planning system. This is a rather vast topic which requires a lot of background information. In order to understand the complexity of a planning system we will look at theory connected to the different parts of a planning system. As Newman (1996) puts it, planning gains its power by the embodiment in the legislation and regulations of the legal system in a country. The legal system often differs between countries which consequently creates different planning approaches. The administrative system of the countries also varies in their implementation of planning. Moreover, the structure of the public administration plays a central role in the way planning is handled. In this way we can say “planning systems can be differentiated by variations in national legal and constitutional structure and administrative and professional cultures” (Healey & Williams, 1993, p. 701). Then how are plans made that are conform to the international green growth policy? In order to understand this we need to understand how the planning processes are organised and how an international political goal can be reflected in the planning product. Below we will discuss the different terms of relevance.

Defining the planning instruments for the making of a plan

The planning process is a vast process consisting of several different factors. The structure of the planning system is important but before we discuss this it is important to understand the instruments related to the making of a plan. When we talk about instruments, we refer to a plan or planning policy and only the spatial planning instruments listed in the law. The process consists of four categories of instruments used to create a land use plan. These instruments can be classified in the following categories:

1. National policy
2. Strategic land use pattern
3. Framework (Masterplan)
4. Regulatory

National policy instruments can be defined as the national governments policies that are either applied to the whole country or to specific areas in the country. They are created in order to provide a foundation for more detailed and strategic plans. One can differentiate between three main types: (1) the national spatial perspective or plans with a clear spatial dimension, (2) planning guidance which gives criteria to be taken into account in the preparation of plans, but without a strong spatial dimension, (3) sectoral plans or guidance for a specific activity such as transport and infrastructure.

Strategic land use and development patterns are instruments used for pointing out areas which should be protected or developed for certain uses. These do however need more detailed specification through detailed planning instruments and other regulation procedures. They can be created for several areas; functional regions, city regions or administrative regions.

Thirdly, framework instruments have the purpose of recognising the pattern of land use in a local authority, a community or small groups of local authorities. These are similar to the second instruments and are somewhat strategic, but also identify specific locations on a detailed map. Nevertheless, they do not automatically give development rights, instead more detailed instruments are used for smaller areas or other regulation tools.

Lastly, the regulatory instruments are the ones which take control over or promote development. They are often used for small areas, such as individual sites, whereas other regulatory instruments cover vast areas (European Commission, 1997, pp. 51-53).

Planning process and planning instruments in different government levels

Having investigated the planning instruments we will take a look at how they are being used in the different governmental levels. We will also touch on some parts of the planning process.

European countries all have some hierarchical structure of spatial planning instruments, and the higher levels usually bind the lower levels. The reason is usually that the planning instruments are closely related to the structure of the government as explained earlier. Some nations are however jointly connected between administrative units (ibid, 1997, p. 53).

The integration of the spatial planning framework is varied. If a country has a strong national sectoral integration, they often have a national plan where sectors are required to coordinate. Regional levels of government usually take on responsibilities which are more regional and which they have more knowledge about. They tend to be coordinated through national or local organisations and parties with interest in the area. The local level is less formal, but the local detailed instruments need to conform with higher level plans. Nevertheless, these also need help from other agencies to implement their actions.

Most countries have some form of policy statement on the national level which gives directions to how plans should be made and for regulation on the lower levels. Either a nation has a broad spatial development perspective, or there is a general policy statement on certain topics and specific plans for the recognition of spatial implications of social and economic policies.

According to the European Commission (1997) all nations in Europe have one or another form of spatial planning instruments beneath the national level, and they are usually prepared by a regional administration. They have broad objectives and principles for planning, however the complexity, coverage and responsibilities for preparation are varied. The instrument identifies wide development patterns or it can specify specific growth quantities and change in sub-areas. Nations with large populations tend to have more formal strategic planning structures and the regional government has a great deal of responsibility for the strategic instruments. Countries with small populations tend to leave the responsibility of strategic instruments to the local government. These local governments or municipalities can cooperate through establishment of forums and the plans may cover vast areas despite being a local government initiative.

The European Commission (1997) further states that all European countries use framework instruments. They are always prepared for a whole local government unit or higher levels. These give directions for preparation of more detailed plans or other regulation of development. These instruments often include information on regulations for the area or specific parts of an area where they do not need to be made more complicated in detailed plans.

The majority of European countries use the

regulatory instruments. This consists of site specific allocations or zoning to regulate development, building or land use. The coverage of the regulatory instruments is varied, however they are often restricted to the areas where they are required to facilitate or directly implement development.

All the European nations also include some form of consultation and participation in the process for preparing and adopting the plans. This is especially seen at the local government level. The consultation brings together all the interested parties and it is possible to give a formal objection before the plan is adopted. Most commonly, the public can be involved in the plan-making process through: (1) consultation when the intention to produce a plan is there, (2) after publication of the plan proposal, (3) attendance at hearings and inquiries, (4) representation through consultative organisations or (5) by challenging the plan after its adoption (European Commission, 1997, pp. 53-55).

International impact on national planning

As we have seen in the planning instruments which have been used at different governmental levels, we will see how a national government can be conform to international policy.

The European Union has become an important

international player in relation to spatial development, but does not cover the main spatial development policies. It has especially done well in its policy of environmental protection (European Commission, 1997, p. 107). However the European Union is most certainly one of the few supranational unions we have to this day.

Yet, several 'think tank' organisations do have some form of supranational impact through their education and policy work (Rinne, 2008, p. 676). The 'think tank' organisations, in contrast to EU, do not have legal binding policies which countries are required to abide by. Nevertheless, we can say that work by 'think tank' organisations such as OECD has had an effect on several less developed countries and has enhanced their spatial planning policies, especially in the education of climate friendly and sustainable land use.

It is important to note that OECD has been called a 'think tank' organisation, but it has more power than stated in a definition of a 'think tank': "a research institute or other organization providing advice and ideas on national or commercial problems; an interdisciplinary group of specialist consultants; (also) a private space used for deliberation" (Oxford English Dictionary, n.d.-b). Many have explained the OECD as a plain 'think tank' organisation, which has understated the importance of the organisation (SPERI, 2014). The difference can be seen in that OECD is an international organisation with members from around the world, policies in several fields, and

has legal instruments which can have some legally binding obligations (soft law) to member states if they do not abstain from it when adopted. Nevertheless, the declaration of green growth does not have these binding obligations as it is defined, in the OECD's explanation of legal instruments, as "solemn texts setting out relatively precise policy commitments are subscribed to by the governments of Member countries. They are not formal Acts of the Organisation and are not intended to be legally binding, but they are noted by the OECD Council and their application is generally monitored by the responsible OECD body" (OECD, n.d.-d). Although it has less regulatory power, it does not mean it has less value compared to other conventions and agreements' relationship to the Norwegian planning and building act. If we look at the implementation success of non-binding OECD policies in Norway, research showed that 43% of OECD recommendations were adopted and 34 were pending (Edwards, 2012, p. 13). Although these numbers need to be quality assured it gives a signal that OECD policies have effect on the national government policy, and which could also affect the planning system and the instruments thereunder.

2.1.1 Terms and Concepts

2.1.1.1 General terms and clarifications of use:

Supranational

Used to explain issues that have influence over and transcend administrative boundaries, it is not used to describe issues which have higher power than the national government unless explicitly stated.

Sovereignty

As Gregory (2009) puts it, sovereignty of states can be divided into two processes which are interrelated. "First, internal sovereignty means that external powers are excluded from exercising authority within a state's territory, and that the state has authority over the whole of its territory. [...] Second, external sovereignty means mutual recognition from other states in the system", such as from United Nations or OECD (Gregory, 2009, p. 706). Globalisation has thus challenged the sovereignty of the nations.

South Korea

South Korea and Korea are used interchangeably when talking about the Republic of Korea, they have the same meaning unless explicitly specified. When talking about North Korea the term South Korea is explicitly used.

Korean administrative units

- Do is a term equivalent to a province.

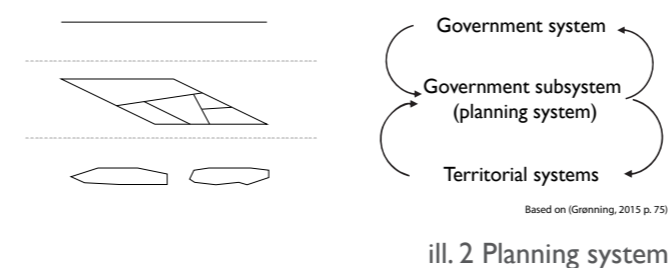
- Si is a term equivalent to a city.
- Gun is usually used about a rural area and can be referred to as a county usually found outside cities.
- Gu is an urban area or district which is only found in the metropolitan cities and Seoul.
- Eup is defined as the urban division of a county or Gun
- Myeon is defined as the rural division of a county or Gun
- Dong is referred to a neighbourhood area found in cities including cities, metropolitan cities and Seoul.

2.1.1.2 Planning system

A planning system can consist of three central elements in order for it to be considered a holistic planning system. We differentiate between the controlling elements, acts which regulate planning, and the territorial area we plan for. This includes law, coordination between players, effective decision making, procedures and the results of planning. The procedure and coordination between players can be classified as the activity which takes place in the beginning of a planning process. The next step is the change of land use where effective decision making and the law play a central role. Lastly, we have the results of the planning process which is shown in a land use plan and which regulates the land through provisions.

The top level of a planning system consists of a

government system which controls policies to be used. Then we have the experts who have the expertise on the planning system and act as mediators for the government system (government subsystem). The subsystem makes it possible to have national policies, strategic land use patterns, framework and regulatory instruments. Finally, the territory (territorial systems) is where the policy is implemented (Grønning, 2015, pp. 58-60, 73-74). These three are however in constant change as policies change, the planning tools change and the land use of the territory is changed (see illustration). Consequently in order to understand the planning system (government subsystem) we need knowledge about the two other systems. Therefore the text will also describe the geographical (territorial system) and administrative (government system) context of the two case studies: Norway and South Korea.



2.1.1.3 Public administration

In the fields of human geography and economy a public administration can be defined as "the different government agencies that administer, oversee and manage public programmes and that

have executive, legislative or judicial authority over other institutions [...] within a given spatial unit, such as a nation-state or a region" (Gregory, 2009, p. 598). This definition will form the basis upon which the public administration will be discussed.

2.1.1.4 International convention and agreement

International is a word which can be defined as something concerning or taking place between several nations. The word convention can be defined "an agreement between sovereigns or states" (Steigan & Lid, 1997, pp. 451, 539). An agreement can be defined as "an arrangement (typically one which is legally binding) made between two or more parties and agreed by mutual consent" (Oxford English Dictionary, n.d.-a). We can thus conclude that an international convention and agreement can be defined as an agreement between sovereign states which is accepted by both states.

2.1.1.5 What is Green Growth?

"Green growth" has become a more widespread and known concept in the world. Before the financial crisis came along it was not spoken much of. However, now it has gained a lot of attention in the policy discourse internationally, especially

relating to economy and development. The World Bank, Organisation for Economic Co-operation and Development (OECD), Global Green Growth Institute (GGGI) and United Nations Environmental Programme (UNEP) have together established what they call a “Green Growth Knowledge Platform” as a place for research and knowledge specifically about green growth (Falkner, 2013). Several meetings and networks have been initiated as a result of the “green growth” concept, and several countries have implemented green growth as a policy (GGBP, 2014).

The origin

The content of green growth is not new, we can see signs of green growth thought if we go back a few decades. However, the discussion of the concept as a policy began in 2005 during the Fifth Ministerial Conference on Environment and Development (MCED) in Seoul (South Korea). Present were 29 ministers and deputy ministers from 52 nations in the Asia and Pacific Region. During the conference they agreed upon shifting the focus from the “sustainable development rhetoric” to green growth (UNESCAP, n.d.; United Nations, n.d.-a). As a result of the meeting they made the Ministerial Declaration on Environment and Development, the Regional Implementation Plan for Sustainable Development in Asia and the Pacific (2006-2010) and the Seoul Initiative on Environmentally Sustainable Economic Growth (Green Growth) (IISD, 2005; SINGG, n.d.). Just a few months after the conference, the Seoul

Initiate Network on Green Growth (SINGG) was established by the Ministry of Environment in South Korea, which aims to pursue the policies for green growth written in the documents from the MCED.

In 2008, around the time of the financial crisis, the Republic of Korea saw that green growth would be a good plan to strive towards in order to create more jobs. A national development vision, Low Carbon Green Growth, a National Strategy for Green Growth and a Five Year Plan for Green Growth was adopted between the years 2008 - 2009 (United Nations, n.d.-a). Since the implementation of these policy frameworks, South Korea has been influential in making the concept more widely accepted through promoting the concept to OECD and through other channels. However, to this day, the OECD is one of the major supporters of the green growth concept and has made numerous publications and books focused on green growth policy (OECD, n.d.-c).

Definitions

Green growth is simply stated by Jacobs as the “economic growth (growth of gross domestic products or GDP) which also achieves significant environmental protection” (Falkner, 2013). It is however unclear how much, or little, environmental protection there should be in order to call it significant. Before, it was the reduction of climate change which was the important factor, but now there are so many resources which are

included in the equation. Therefore we cannot call this definition a well defined answer. The definition of green growth has been attempted by several organisations such as the World Bank, OECD and UNEP (See Appendix). First we will take a look at the definition by the World Bank, then the OECD and finally the UNEP.

The World Bank defines green growth as “growth that is efficient, clean, and resilient — efficient in its use of natural resources, clean in that it minimizes pollution and environmental impacts, and resilient in that it accounts for natural hazards and the role of environmental management and natural capital in preventing physical disasters.” (World Bank, 2012). This definition, as well as the before mentioned, does not give a clear idea of the level of environmental protection.

OECD however, takes on a sustainability-alike definition of green growth: “green growth means fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies.” (OECD, 2011). Jacobs states that these definitions define environmental protection as what is not met by current growth patterns. He then concludes that the meanings behind the definitions have a political grip (Falkner, 2013).

Lastly, UNEP does not use the term green growth explicitly, they use the term “green econ-

omy”. Green economy is similar to green growth, and they define green economy as “results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (UNEP, 2011). The term is similar because they believe environmental protection is compatible with growth, and their network is similar to that of green growth.

We have discovered that there are several definitions to green growth, but with one overall agreement that environmental protection is compatible with growth. However, how is green growth different from the term sustainable development that became known more than 25 years ago? Let us explore the history behind sustainable development in the following section.

Sustainable Development and its history

The green growth concept we have discussed so far expresses growth which is in accord with environmental objectives. The concept is however not new. The evolution of the concept stems from the discourse of sustainable development which was known through the Brundtland report in 1987, and became institutionalised through the Rio Earth Summit in 1992. The term sustainable development was a breakthrough in environmental policy making, and became of central importance in national environmental planning around the world (Falkner, 2013). Today however, World Bank, OECD and UNEP, that are encour-

aging green growth principles, claim it is not a substitute for sustainable development. On the contrary, they see green growth as a method to achieve it (OECD, 2011; UNEP, 2011; World Bank, 2012). Then why is there a need for a new concept? Jacobs claims that sustainable development has lost its grip over the years. The concept was however implemented widely in governments after the 1992 Rio Earth Summit held in Brazil. This became of central importance to prioritise environmental objectives in the governments. Furthermore, there was an increasing amount of environmental policies and legislations that came as a result of this new concept. However, the impact started to loosen after we entered the 20th century. Moreover, the countries efforts and commitments to protect the environment were not enough to turn around the deterioration of the global environment. Climate changes caused by human development were an important factor which made it evident that change had to happen. Although the universally supported concept of sustainable development was already implemented in governments, it did not seem to be as supportive as one thought. Jacobs claims it lost meaning to make a profound change because it didn't help enough in the most crucial time when there was a great need to protect the environment. However, during this period, solving environmental issues were focused on the expenses and constraints, and to limit growth in order to prioritise the environment was not attractive to politicians. Growth of GDP which helped em-

ployment was of greater interest to politicians and could attract many votes. Increased employment would also help the government and businesses.

Green Growth - A new Sustainable development?

As we discussed in the previous section, the history of sustainable development has been a history of much conflict between protection of environment, development and growth. Now that we have the idea of what sustainable development has contributed with, we will see how green growth differs from this concept.

Sustainable development brought negativity and a politically difficult concept, but the new concept, green growth, wants to transform this negativity into something positive. As explained earlier, both concepts have the idea of making environmental protection and growth work together. However, while sustainable development focused on the political support by evading questions related to the compatibility between environmental protection and growth, green growth argues that environmental protection gives "better" growth (Falkner, 2013). This has to do with the history of the concepts. Sustainable development started from the environmental movement where the limits to growth was important. Green growth however, started from environmental-economic policy makers, who thought growth was important. The meaning of sustainable development was

moreover challenged and understood in many different ways depending on the interests in comparison to green growth which is reasonably easy to understand (Jacobs, 1999). Based on the understanding of the two concepts, sustainable development and green growth, we understand that green growth is claimed to be an answer to the deficiencies of sustainable growth. Furthermore, green growth focuses both on the highly debated issues related to climate change and economic growth. It is however not a concept that will or attempts to replace sustainable development, the function is rather to use green growth as a means to achieve sustainable development (OECD, 2011).

Critique

Several definitions of the green growth concept have been made by different organisations, and they have established the concept with a different target audience in mind. Consequently, even though organisations have similar names such as green economy or green growth, the difference between them have become vague and they are used as undifferentiated terms. Some call them a spectrum of different 'shades of green', where some put a lot of emphasis to the critique of environmental sustainability of the modern capitalism, while others have more narrowed concerns regarding the climate changes as it is with green growth. Others have pointed out that some try to pull in the social aspect into the concept of green growth, such as references to 'equitable

green economy' or 'inclusive green growth' which clearly has similarities to sustainable development. Then someone might ask, what is the purpose of green growth if the social aspect is being pulled in, why bother making a new policy? (UNDESA, 2012, pp. 60-62). This discussion will most likely continue in the coming years, and it will be critical that green growth sets more clear standards for the concept.

2.2 Research method

It is always a difficulty to choose the methodology before it is actually done. The process of finding a research method is a circular process which requires everything the paper to be almost finished. Qualitative method is often used for research questions and explorative research, while the quantitative research method focuses on causality and descriptive statistics. The collection of information in this master thesis has primarily been a qualitative research method. The empirical foundation for discussion is based on:

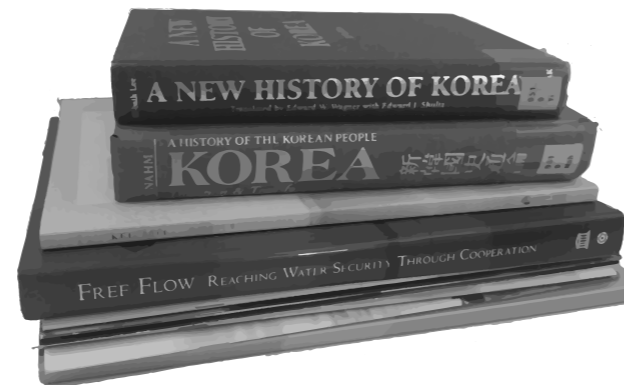
- Document research
- In-depth semistructured interviews
- Registration and illustration production of analysed data.

Emails, phone-calls, interviews and meetings with staff from Korea Environment Institute (KEI), Seoul Metropolitan Government, Global Green Growth Institute (GGGI), ARA Architects & Engineers, Korea Institute of Registered Architects' (KIRA) Green building committee, DaaRee Architect & Associates and the Royal Norwegian Embassy has been of great help to understand the concept of green growth and how the different players in society work together for green growth.

Professors from Yonsei University has also been of help to clarify ambiguities in the material. All the interviews conducted were done in Seoul in South Korea, except for the interviews with KEI which was done in Sejong City in South Korea.

The production of the thesis, illustrations and text has been done through the use of Adobe Illustrator and InDesign.

All pictures are illustrated by me, or taken by me unless specified otherwise.



2.3 Ethics

In the work with this thesis, it is attempted to be orderly and consistent and keep good research ethics. Especially for my interviews I focused on giving interviewees enough information about what the interviews would be about and how I would conduct the interviews. Before ending the interviews I tried to give the interviewee a summary of the interview in order to make sure my understanding was correct. As I have used interviews for this research the thesis has been notified to the Norwegian social science data services.

2.5 Validity and Reliability

Researching how an international policy concerning green growth has been represented in land use plans in the framework of two national planning systems has not been an easy task. Analysis of South Korea, a totally different nation, with a different culture and history has been an interesting experience. However, learning a completely new planning system during this short period I have had to write the thesis has had its complications. The Korean legal frameworks which has been looked upon is read in an official english translated version, but the Korean version will always be considered the legal version. Moreover, limited comprehensive english planning literature on the Korean planning system, on specific land use plans and its provisions has limited the thoroughness of this research. As a result, it will be hard for the reader to overrule the validity of the research.

Part II

3. Nature of international policies and their relationship to national planning systems

In order to understand the correlation between policies and planning systems we need to understand how international conventions and agreements generally are built up. Simply stated, the nature of supranational policies. This gives us guidance of aspects we should be looking for in the land use plans. The international policies explained in this chapter are implemented into national governmental systems. In that moment they are ratified by governments they have committed themselves to adhere to the matters addressed in the policy. Consequently, it becomes a part of the country's policies in the sense that the government should be striving to adhere to it in all fields. More importantly, they become significant for the governmental sub-system (planning system) as national policies which can change the direction for the use of land, introduce new planning tools or change phases in the planning process. Accordingly they can be of profound importance to the sub-systems management and utilisation of the territory. This includes how national policies, strategic land use patterns, frameworks and regulatory instruments, which we discussed in the previous chapter, are used on the territory. However, what is it in a policy which makes international policies interesting to look at in relation to the planning systems? It is how a planning system can achieve goals set forth in an international policy. All conventions and agreements have goals or objectives which are measurable. Consequently, in order for the planning system to achieve the goals, we need to look for ways to measure the international policies that

the planning systems can work with. This chapter will look at two things. First, we will look at some international policies in order to understand their nature and how specific goals or objectives they mention can be measured. Second, we will decide on one international policy that will be researched, and set up indicators which makes us able to measure the selected international policy.

3.1 International agreements and conventions

In this chapter we will present some international conventions and agreements that are important for the environment and for people of nations related to green growth and planning policies. The international conventions and agreements I will discuss range from 1966 with the convention concerning civil and political rights to 2006 with the convention on the rights of persons with disabilities. All the conventions and agreements listed below are both accepted and ratified by Norway and South Korea. We will take a look at these in order to get a brief view of the nature of the supranational policies.

United Nations International Covenant on Civil and Political Rights, adopted 16.12.1966

The covenant was established in 1996 and was put into force in 1967. The countries who have implemented the covenant commits themselves to respect the citizens rights to life, personal

freedom, legal protection, freedom of speech and a democratic governance system.

United Nations Framework Convention on Climate Change (Climate convention), adopted 09.02.1992

The climate convention was established in order to reduce and stabilise the global emissions of greenhouse gases. Through the stabilisation of greenhouse gas concentrations we can stop threatening intervention with the natural climate system (United Nations, 1992). There is however no emission restrictions for each country, but by charting the current emissions we can see the improvement in the individual countries. Even though there are no restrictions in the convention, article 17 in the convention states that additional protocols can be put into force which do set up limitations to emissions. The most known and most important is the Kyoto-protocol which also is binding (FN Sambandet, n.d.-a).

The climate convention established the principle of "common, but differentiating principles". In basic terms, the principle is saying that all nations should work with long term plan to contribute to reduce the greenhouse gas emissions. However the protocol takes in consideration that the rich and industrialised nations are those whom have created the climate problems climate, consequently the convention explicitly states they should have a greater responsibility to reduce their emissions. Another result of the climate convention was the establishment of the Global Environmental Facility, a joint financing program,

to help developing countries and other countries which are in the process of adapting to climate changes, preservation of biodiversity and to prevention of land erosion (Ibid, n.d.)

Kyoto-protocol, adopted 11.12.1997

The Protocol was adopted in 1997, but not put into force until early 2005. It is an additional agreement to the United Nations Framework Convention on Climate Change and has restrictions to how much emissions countries can release in a set period. The developed nations are the ones that are required to reduce their emissions. In the period between 2008-2012 they were required to reduce their greenhouse gas emissions with 5 percent compared to 1990 around the time when the climate convention was established. However, many developing countries have signed this agreement although none have emission commitments they need to adhere to. The Kyoto-protocol allows cooperation between the nations, also buying and selling of nations emission quotas (FN Sambandet, n.d.-d). Several have claimed that the Kyoto-protocol is one that is lacking in terms of willingness to overcome the climate problems (Böhringer, 2003, pp. 459-461; Ekardt & Hovel, 2009, pp. 102-114). Moreover, there is no coherence between the obligations in the Kyoto-protocol and the goals of the Intergovernmental Panel on Climate Change.

Convention on Biological Diversity, adopted 05.06.1992

Article 1 in the Convention on Biological Diversity states the convention's objectives. It is stated the nations which has signed this convention agrees to the "conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources" ("Convention on Biological Diversity: Convention text," 2001, p. 3). Through the signing of this convention a nation commits itself to make these laws a part of the legal system in their country.

The convention was one of the five important international documents which were adopted in 1992 during the United Nations Conference on Environment and Development, also known as the Earth Summit, in Rio de Janeiro. The four remaining are the Rio Declaration, Agenda 21, Forest principles and the already mentioned Climate Convention, which are meant to serve as a basis for work on sustainable use of the natural resources. In the same way as the Climate Convention, the Convention on Biological Diversity states few obligations to the nations part of the convention. Since the main objective of the convention is to create a common base for future obligations through new agreements, they avoided stating many obligations. In 2002 during the sustainable development meeting, they created more goals to slow down the eradication of biological diversity greatly (FN Sambandet, n.d.-b).

Convention on the Rights of Persons with Disabilities, adopted 13.12.2006

The convention is an continuation of the work on making standard rules for people with disabilities by the United Nations general assembly in 1993. The idea of the establishment of the convention is to "promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities". This is stated to respect the inborn dignity of human beings with disabilities (United Nations, 2006; article 1). As the living standard and welfare in the world rises, there is an increase of people with some form of disability. It is said around 10 percent of the worlds population have disabilities in one or another way, consequently it is important to include these people in our daily lives by establishing some standard rules (United Nations, n.d.-b).

Convention on the Rights of the Child, adopted 20.11.1989

In basic terms the comprehensive convention states that countries must respect and acknowledge children's basic rights to life, development, protection and participation. This is said to be one of the most extensive conventions on human rights by the United Nations. It is debated because of that reason, since many member nations have opted against many of the articles. Many nations and cultures have different views upon what is the child's "best interest", as stated in the convention (United Nations, 1989). Moreover,

some are not in agreement that children should have their own rights. Thereby the convention's comprehensiveness is said to be its strength, but also it's weakness. Before the convention came to be, the children legal status was primarily connected to their parents and they had the authority to decide over children (FN Sambandet, n.d.-c).

Rio Declaration on Environment and Development, 3-14.06.1992

The declaration is more commonly known as the Rio Declaration, and has 27 principles. To bring about these principles there were long discussions about for instance how developed countries could focus solely on nature, an "elitist luxury", when the developing nations are still fighting poverty (Callicott & Frodeman, 2009, p. 201). As a result many principles were rewritten, and this controversy between rich and poor has certainly influenced the document. However, there are some key elements which have been implemented in countries legal system: responsibility for spillover damage between countries, polluter pays, public participation, environmental impact assessments and more (ibid, p. 202). Although some would say the declaration is lacking, it is an international agreement which does serve as an instrument for environmental policy.

Convention on the Organisation for Economic Co-operation and Development (OECD), adopted 14.12.1960

On the 14th of December 1960 the Organi-

sation for European Economic Co-operation was renamed the Organisation for Economic Co-operation and Development. Some of the key goals of the organisation is to "achieve highest sustainable economic growth and employment", "rising standard of living", "contribute to sound economic expansion" and "contribute to the expansion of world trade" (OECD, n.d.-b; article 1). With these goals in mind they agree, for instance, to encourage efficient use of "economic resources", "development of their resources" through research and help other nations with "economic development" etc (OECD, n.d.-b; article 2). To this day, 34 nations have joined and ratified the convention, most of which are well developed nations. Through the work of OECD, which is to "promote policies" for the improvement of economic and social well-being for the world's population, governments can cooperate, exchange knowledge and look for solutions. The focus on OECD today can be summed up into four points: (1) Restoring confidence in markets and the institutions which make them function, (2) Re-establishing healthy public finances as a base for future sustainable economic growth, (3) Promoting and supporting new sources of growth through innovation, environmentally friendly 'green growth' strategies and the development of emerging economies, (4) Ensuring that everyone can develop skills to work productively and satisfyingly in the jobs of tomorrow (OECD, n.d.-a).

3.2 From supranational policies to national implementation

Introduction

The next question is how these global policies are implemented into a national policy. In this regard it is important to realise that the country is the sovereign power, and per definition there is no such thing as a supranational government. There are however tendencies towards global governments regulating legal policies of countries. An example of this is the European Union. However, this paper will look at an international organisation and how the member countries are “asked” to follow up on its policies which could be implemented to the national level. The requirements are however not mandatory in the sense that no sanctions will be given if they do not adhere to the policies.

3.2.1 OECD Green Growth Strategy

To see how a global policy is implemented into national policy we will use OECD’s green growth policy which member nations commit themselves to by signing the OECD convention. Article I in the OECD convention states that the organisation shall “promote policies” in order to “achieve the highest sustainable economic growth and employment and a rising standard of living in member countries [...] and contribute to sound economic expansion [...] and contribute to the expansion of world trade [...]” (OECD, n.d.-b). The organisation has however no regulatory responsibility and cannot force policies upon member or non member countries (Mahon & McBride, 2008, p. 28; OECD, n.d.-d). As this is a comparative analysis of two countries I have picked two member countries of OECD, Norway and South Korea, to see how the two nations have implemented OECDs green growth policy. The reason Norway itself is not individually analysed is that by comparing two countries we can see differences, similarities and it will give a clearer picture of the policy and implementation of it.

A comparison of green growth in two countries can be difficult as no countries are alike in their history, culture, development, political structure, policy and institutional context, regulatory system, resources, environmental circumstanc-

es etc. These affect how a nation has come to become what it is today. Moreover, there is no “green growth strategy package” which can be implemented into each country. As GGGI puts it, green growth must be addressed for a specific country, thus it is context based because of the economic, environmental, and social dimensions it needs to take into consideration (GGGI, 2015, p. 15). There is however one general way which is universal to reach green growth, that is to be efficient with resource use and its management so that environmental damage can be prevented. In addition, every green growth strategy has focus on how the economic aspect and the environmental aspect can work together as these are the central values in the green growth term (OECD, 2011, p. 10). The key point is to find cost-effective ways to prevent pressure on the environment while increasing growth and avoiding going beyond the thresholds set in the local, regional, national and global environment.

What is central to reach such a goal? It is important to be critical to the nations ways of reaching growth. Is it done in a way that enhances the importance of our environment, or is it done by thinking of the economical circumstances? Being critical to the way of reaching growth is important, and it is the government which should lay the foundation for environmentally friendly growth.

In order to measure green growth in the planning systems of Norway and South Korea, we need

some measuring tools. Consequently we will use a framework which can measure how an international policy is implemented in the end product of a planning system. For this reason we will use OECD’s green growth indicators as a basis for analysing land use plans in Norway and South Korea. Korea by request from OECD, as opposed to Norway, has already made their own indicators which are based on and conform to OECD’s Green Growth indicators (Statistics Korea, 2012). The indicators used to analyse Norway and South Korea will be explained further below, but first we will take a look at what an indicator is in order to understand how indicators handle data.

What is an indicator?

An indicator is used in order to designate or set conditions for which are complex and expensive to calculate exactly. It is quantifiable in the sense that it can be described in measurable quantities. It simplifies the complexity in relationships to an indicator in order to give some signals about the condition or the change in condition. It is furthermore important that the indicator is as objective as possible in order to give a reliable and clear signal. When the indicator has been defined, it should be able to be measured by different people and at different times. Consequently, in short we can say that an indicator has three chief functions: (1) simplify, (2) quantify and (3) communicate (Norwegian Forest and Landscape Institute, n.d.).

OECD Green Growth Indicators

Environmental and resource productivity of the economy

1. Carbon and energy productivity - Economic output generated per unit of CO₂ emitted or total primary energy supplied.
 - Carbon productivity: Growing CO₂ emissions (accounts for 80% of total GHG emissions) is a major contributor to greenhouse gas (GHG) emissions which leads to changes in temperature and our environments. Climate change affects ecosystems, human settlement and agriculture.
 - Energy productivity: Separate energy use, and other related emissions as a cause of economic growth. Improvements in energy efficiency and development, and use of cleaner fuel and renewable energy sources.
2. Resource productivity - economic output generated per unit of natural resources or materials used.
 - Materials are used and managed well in all stages (life-cycle-based-waste), and increase environmental benefits associated with agricultural production for food security.
3. Multifactor productivity (MFP) - adjusted for the use of environmental services and natural resources. Enhanced productivity through efficient use of natural assets and environmental services can create opportunities for new markets and jobs.

The natural asset base

1. The availability and quality of renewable natural resource stocks including freshwater, forest, and fish resources.
2. The availability and accessibility of non-renewable natural resource stocks, in particular mineral resources, including metals, industrial minerals and fossil energy carriers.
3. Biological diversity and ecosystems - including species and habitat diversity as well as the productivity of land and soil resources.
 - Sustainable management of land and soil resources (optimal mix), preserve land's essential ecosystem functions.
 - Maintain or restore diversity and integrity of ecosystems, species and genetic material, and to ensure sustainable use of biodiversity

The environmental dimension of quality of life

1. Human exposure to pollution and environmental risks - This includes natural disasters, technological and chemical risks, the associated effects on human health and on quality of life, and also the related health costs and impacts on human capital and on labour productivity.
 - Reduce emissions of local and regional air pollutant and to limit exposure of the population to air pollution.
2. Public access to environmental services and amenities, characterising the level and type of access that different groups of peo-

ple have to environmental services such as clean water, sanitation, green space, or public transport.

- Protect and restore surface water bodies and groundwater reservoirs, public access to sewage treatment and safe drinking water.

Economic opportunities and policy responses

1. Technology and innovation that are important drivers of growth and productivity in general, and of green growth in particular. Strengthen research, foster innovation and use of new technology production, and use by the population.
2. Production of environmental goods and services that reflect an important, albeit partial aspect of the economic opportunities, which arise in a greener economy.
3. Investment and financing that facilitate the uptake and dissemination of technology and knowledge, and contribute to meeting the development and environmental objectives.
4. Prices, taxes and transfers that provide important signals to producers and consumers and that help internalise externalities. To be complemented by indicators on regulation and on management approaches.
5. Education, training and skills development.

For a full description of each indicator see document "Green Growth Indicators 2014" (OECD, 2014b). Many of OECD's indicators are in many ways relevant to urban planning, although

few focus solely on urban planning. Moreover, a governmental sub-system can contribute to implementation of several initiatives through the preparation of land use plans, together with its regulatory tools. However, as they are interrelated with planning and emphasises the core subjects we want to discuss in this paper, the indicators forms a base for how we will investigate the land use plans conformity with green growth.

INFOBOX I

We have a number of indicators for green growth which are mentioned by a number of organizations. Green growth indicators in different organizations:

- OECD - Green Growth Indicators
- United Nations Environment Program (UNEP) - Green economy
- World Bank - Inclusive Green Growth
- Global Green Growth Institute (GGGI)
- Work between OECD, GGGI, UNEP and World Bank - Green Growth Knowledge Platform (GGKP)
- Inclusive Wealth Report 2012 by International Human Dimensions Programme on Global Environmental Change (United Nations)
- European Union - Resource Efficiency Roadmap
- European Commission - iGrowGreen assessment framework

3.3 Summary and findings

This chapter dealt with the nature of international policies and their relationship to national planning systems. We found that all the international policies can be measured as they have some goals and objectives they are working towards. We selected OECD's green growth strategy in order to be able to analyse how an international policy accepted by member nations is implemented in the two cases we are comparing. How, then, is the planning system designed as an institutional technology for implementation of an international policy? Through the ratification of OECD's convention sovereign nations commit to work towards the goals or objectives stated in the policy. The OECD convention moreover, commits member nations to accept and work towards policies developed by OECD, as long as they do not abstain from it. Consequently, both Norway and South Korea are committed to work for green growth as they signed the green growth declaration in 2009. In order to implement policies related to the land use, the governmental sub-system need to be utilised. The governmental sub-system lay the basis for implementation of policies through planning processes which finally results in a planning product. The planning processes can contribute to green growth with ways to increase environmental and resource productivity, maintain a sustainable asset base, increase the environmental aspects related to the quality of life and create economic opportunities. As a result, we can clearly see how green growth can be implemented through the governmental

sub-system.

The government system consist however of different levels of government. Thus, by implementing the policy nationally, all levels of the government should implement it. However, in order see this we need to investigate the planning products which will show how the planning processes has implemented these policies. Since the planning product is the end product of a governmental sub-system, this will give us a view on how the different levels of governments work together. As we have concluded, a governmental sub-system is designed to implement green growth. What we did not find out is how this is connected between different levels of governments. Accordingly, we will be using the green growth indicators in order to see in what degree the different levels of governments' land use plans are conform to green growth. This will be the topic of the next chapter.



4. Land Use Plans in Norway and South Korea

To be able to analyse the green growth in Norway and South Korea, we need to have a framework of where the limits to what context we can discuss green growth. Otherwise the task would be far too extensive to carry out in this short paper. The already-mentioned green growth indicators will set the base for how we can analyse the plans. As this analysis focuses on land use planning two extra indicators, land use categories and zones requiring special consideration, which is part of the regulatory instrument will also be used to analyse the two lowest level plans in Norway and the lowest level plan in South Korea. These two extra indicators will primarily give signals towards environment and green land. This chapter consequently focuses on how green growth is seen in different levels of land use plans in the two countries. This will include plans which are part of one or more of the four instruments described by the European Commission (1997); national policy, strategic land use pattern, framework (master plan) and regulatory. Hence, more strategic and less spatial plans are also included. The important factor is that they are regulated by their respective national planning law. It is rather important to note that the analysis will give a descriptive and brief overview over the plans and how the green growth indicators (including the extra indicator) is seen in the plans. Moreover, the analysis does not measure the actual physical results (implementation) of the plans, only the intentions and policies connected to the plan.

The chapter will look at eight different land use plans. In Norway, regional plan, municipal plan and area zoning plan, while in South Korea, comprehensive national territorial plan, provincial comprehensive plan, metropolitan plan, urban management plan and district-unit plan. The three plans from Norway are land use plans of regional, municipal and local character, while the five plans from South Korea are land use plans of national, regional, metropolitan, local character. As we can see, there is no land use of national and metropolitan character addressed for Norway. This is because the Norwegian planning system does not have a formal national nor a metropolitan land use plan. Having said that there are national expectations, guidelines and provisions of general character for how land is expected to be used by local governments. This will nevertheless be explained in greater detail later in chapter seven. In contrast, the South Korean planning system has no formal municipal plan despite the resembling function of the municipal plan in their borough plans (urban/gun plan). One should note that there are two plans of local character in South Korea, an urban management plan and district-unit plan. The district unit plan can be compared to the Norwegian detail zoning plan which we will look at in chapter seven. In Norway there is also two plans of local character, this is the detail zoning plan and area zoning plan. These two are very similar and I have chosen not to analyse the detail zoning plan as it has the same characteristics as an area zoning plan.

The selection of the different plans have been done by attempting to locate the similar plans by geography and administrative function, which the municipal, metropolitan, area zoning and urban management plan have achieved to some degree. However, as South Korea has a national land use plan, this has been of interest to analyse despite the fact that there is no Norwegian equivalent to compare to. The regional plans for the two countries have been chosen at random. The Norwegian has however features of a regional transportation plan than a land use plan, while the South Korean is a land use plan. The Norwegian municipal plan and the South Korean metropolitan plan are similar in the sense that both are the capital plans and have some of the same issues relating to population growth and transportation. The area zoning plan and urban management plan have been selected as these two projects are one of the last development projects that will be constructed beside the seafront centrally in the populated cities. As an extra plan I have chosen to look very briefly at the Korean district-unit plan as this has more regulatory tools compared to the urban management plan. The selection of the district-unit plan has been done at random, as no English information of this plan or planning description was available. It is important to note that the plans discussed in this chapter have been adopted after the OECD declaration on Green Growth was signed by Norway and South Korea, excluding the urban management plan in South Korea which started earlier.

The reason we look at many levels of land use plans is to see in what way the green growth indicators appear in the different levels of government. Since the land use plan is the end product of a planning process, the correlation between the plans will show how the different levels of government have policies which are conform to OECD's green growth policy. Thus, the chapter answers a central part of the research question. Although this chapter is very brief in the analysis on land use plans, the main interest has been to see how green growth elements are shown and how the coordination in terms of similar green growth elements in the plans of different levels of governments are seen. After having investigated the planning products in this chapter, the two next chapters will investigate green growth in the two nations governments before we look at the planning systems and the planning processes which has made these plans possible.

We will first look at the Norwegian land use plans before discussing the Korean land use plans. After having investigated the Norwegian and Korean land use plans we will give a short summary of the findings.

4.1 Norway

In Norway we will look at the regional plan, a municipal plan and an area zoning plan. We will start from the top level plans and move chronologically down to the bottom level plans. The Norwegian plans which will be investigated below are connected to the different instruments in the planning system, and have different functions. The regional plan has the form of a strategic land use pattern instrument as the plan expresses that it should be robust for an unpredictable future,

while also adjustable for further development in the future revisions (Plansamarbeidet, 2014, p. 4). This statement expresses that the plan sets a strategic foundation for how and where development should occur at the local level in order to promote a more effective and sustainable future. The municipal plan does also have strategic elements in the two strategic plans for 2030 and 2050, but these are not the main land use plan which we will investigate. The purpose of the mu-

nicipal land use plan is to indicate the future land use and development pattern in the areas of the city (Municipality of Oslo, 2015a, p. 6). It sets the framework and thereby provides predictability for future land use. Thus, the plan can be defined as a framework instrument, but it also carries features of a regulatory instrument. This can be seen through the provisions and focus areas of where development should take place. Moreover, it can also give development rights in the speci-

fied development areas. The area zoning plan can be defined as a regulatory instrument as the plan promotes development, and is legally binding with its provisions.



ill. 4 Planning process municipal plan (Municipality of Oslo, 2015b)

4.1.1 Regional plan for land use and transport in Oslo and Akershus

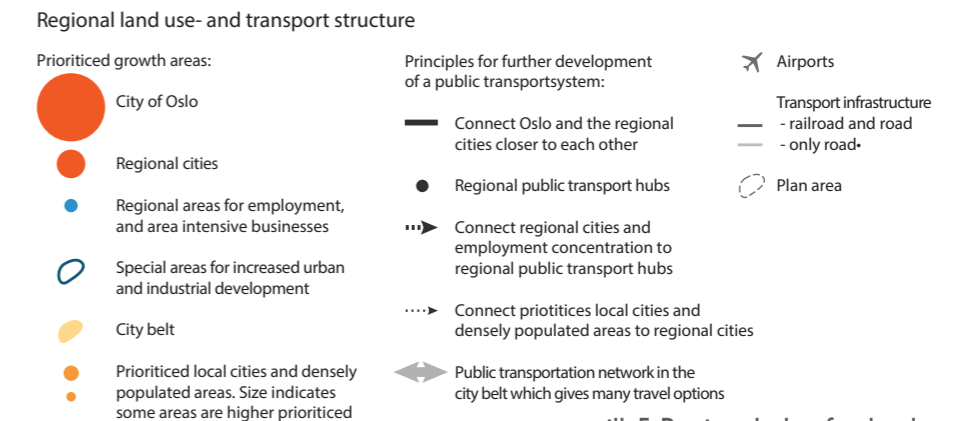
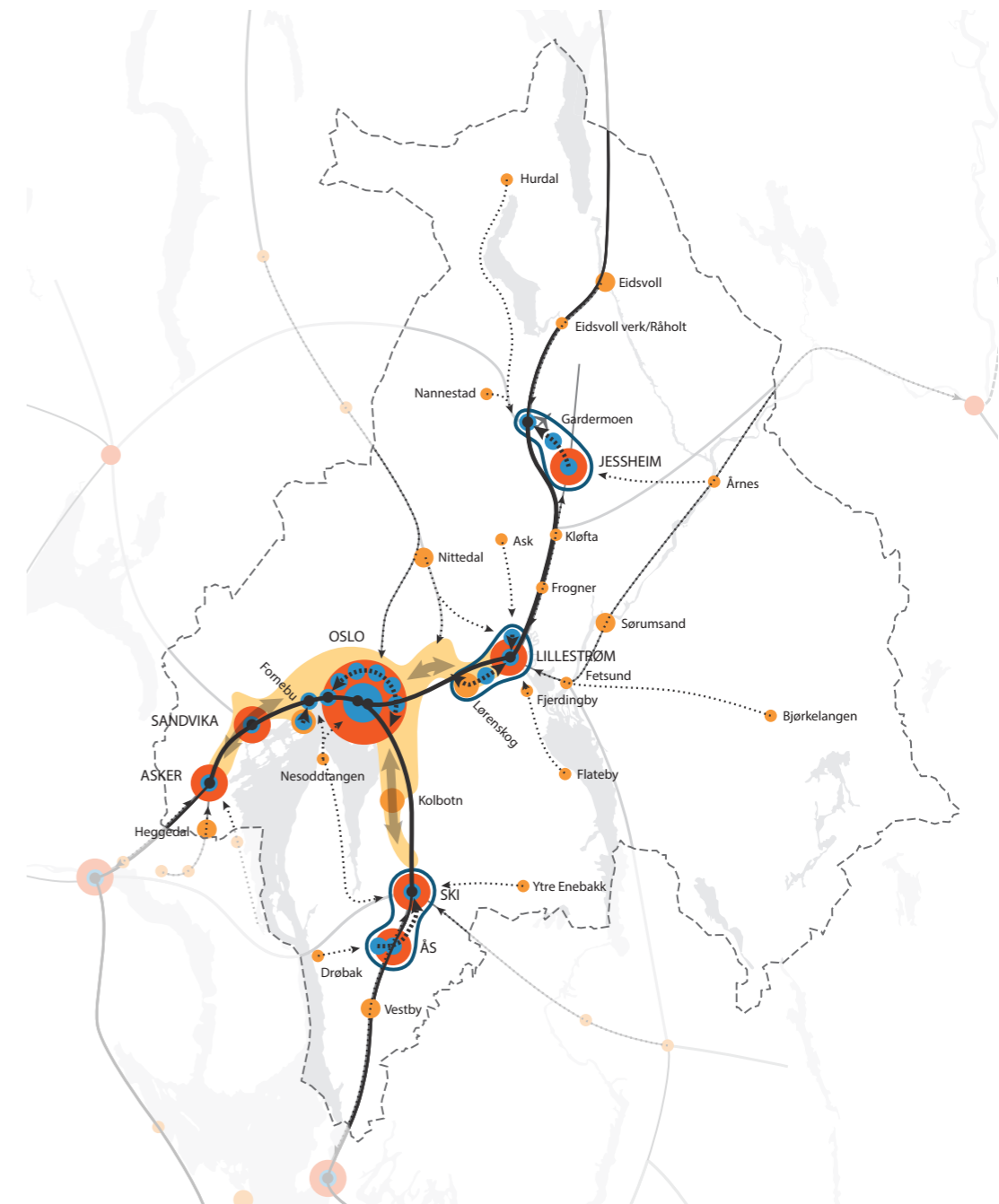
The regional plan is a plan which is in the process of being developed as a result of the parliament which imposed the county of Oslo and Akershus county council to establish a regional plan for land use and transport. This became an important task as Oslo and Akershus are two fast growing capital areas in Norway. So a coordination between many municipalities in Akershus and the county of Oslo was essential to create a discussion of the solutions for future land use and transport development, and also to achieve the national goals of climate, transport, cultivated land and biodiversity (Plansamarbeidet, 2014).

In the regional plan document it is stated that the goal is that:

1. The Oslo-region shall be a competitive and sustainable region in Europe.
2. The development direction shall be land use efficient based on principles about polycentric development and preservation of the overall green space.
3. The transportation system shall in a rational way connect the polycentric region together, to the rest of the country and abroad. The transportation system shall be efficient, environmentally friendly, be available for everyone and with the least need for use of personal car.

Beneath these three goals they have established eight secondary objectives to fulfil. These are:

1. Greenhouse gas emissions shall be reduced so that the region contributes to fulfil the national goals about Norway being climate neutral by 2030.
2. Preparations for adapting to a strong growth in the number of inhabitants.
3. Farmland in Oslo and Akershus shall be managed so that it contributes to fulfil the national goals about halving the annual reallocation of farmland.
4. Biodiversity in Oslo and Akershus shall be managed so that it contributes to fulfil the national goals about nature types and biodiversity.
5. Businesses competitive force enhances through the improvement of transportation services for work and leisure travels, also including logistics.
6. Investments and prioritisation of the transport system to increase the efficient land use and so that a higher percentage of those using personal cars use public transportation, bikes and walking.



ill. 5 Regional plan for land use and transport (Plansamarbeidet, 2014)

7. Cities and dense areas in Oslo and Akershus will develop with quality and content by looking at economic, social, physical and cultural development together in context.
8. Conflicting goals are identified and weighed. All the involved are committed to follow the guidelines and cooperate about finding good solutions which can be realised.

In order to reach the listed goals they emphasise the importance of five factors. The first is to have a good cooperation between players in society in order to adapt to the future growth of the two counties. There is a need for more housing, employment and better transport solutions. The coordination between central government, counties and municipality is essential. By creating one common plan instead of several different will give a better basis for cooperation with regard to the challenges the growth gives, but also the possibilities it gives.

Secondly, during the planning process several different solutions have been established in order to reach the goals. Evaluations show that a more concentrated development pattern and greater focus on public transport. If development continues as before, personal car usage will increase, farmland, cultural- and environmental resources will deteriorate additionally, and the goals set for reducing greenhouse gas emissions will not be met.

The third is to reduce the number of objections during planning processes. Through the establishment of a common plan more predictability between central government, county, municipality and the public will be possible. More specifically, it shows where city development should go before preservation and opposite. In that way, objections to the land use plans from a municipality, county or the central government should not be given if it is declared in the regional plan. The next is regarding the financing of the public transportation. If they want the future inhabitants to use public transportation they need more funding from the central government. An agreement can mean a lot in connection to halting greenhouse gas emission.

Lastly, even though this is a regional plan, it requires all the different player of the planning system to participate. The central government should support the regional plan in their land- and transportation policies and avoid objections. The county should adapt their tasks related to public transportation, road and land policies to follow the regional plan. The municipalities should adapt their land use planning in coordination with the regional plan, and with concentrated development in few areas (Plansamarbeidet, 2014, pp. 12-13).

Where do we see Green Growth indicators in the regional plan?

1st Indicator

How is environmental and resource productivity of the economy shown in the regional plan? Focus on train, subway, biking and walking are effective ways of reducing emissions. Moreover, the location of huge workplaces with many employees should be located at the right place. These should be close to public transportation, while huge workplaces with few employees should be located close to the main roads and without much public transportation (Plansamarbeidet, 2014, p. 34). More freight transport should travel with train through Oslo instead of several trucks.

2th indicator

How is the natural asset base shown in the regional plan? Growth in the prioritised areas should be prioritised although farmland and green areas have to be built down, but not in areas that are not prioritised (Plansamarbeidet, 2014, p. 31). This contributes to more concentrated and dense areas which is another goal of the strategy.

3th indicator

How is the environmental dimension of quality of life shown in the regional plan? Creation of good and stable living environments not only in the prioritised areas, but also in smaller places to ensure the wellbeing of these

inhabitants. Several less urbanised areas shall use buses for “feeding” the trains and subways (Plansamarbeidet, 2014, pp. 25, 37).

4th indicator

How is economic opportunities and policy responses shown in the regional plan? Focus on innovative businesses and university development through ensuring effective and better transportation to these locations (Plansamarbeidet, 2014, p. 21).

4.1.2 Municipal land use plan for Oslo

The municipal plan for Oslo is named “Oslo towards 2030”. It has a legally binding land use plan with provisions as to how land can be used. The plan also has two strategic plans for the years 2030 and 2050. These legally non-binding plans act as helpful tools for how Oslo should develop in the coming years in order to reach the goals set for 2030 and 2050. It is important to note that the plan is not the current legal plan, rather a proposal for the coming plan. Although it is not the current plan, it has more details compared to the previous plan and has introduced a legal binding municipal land use plan which has not been made before.

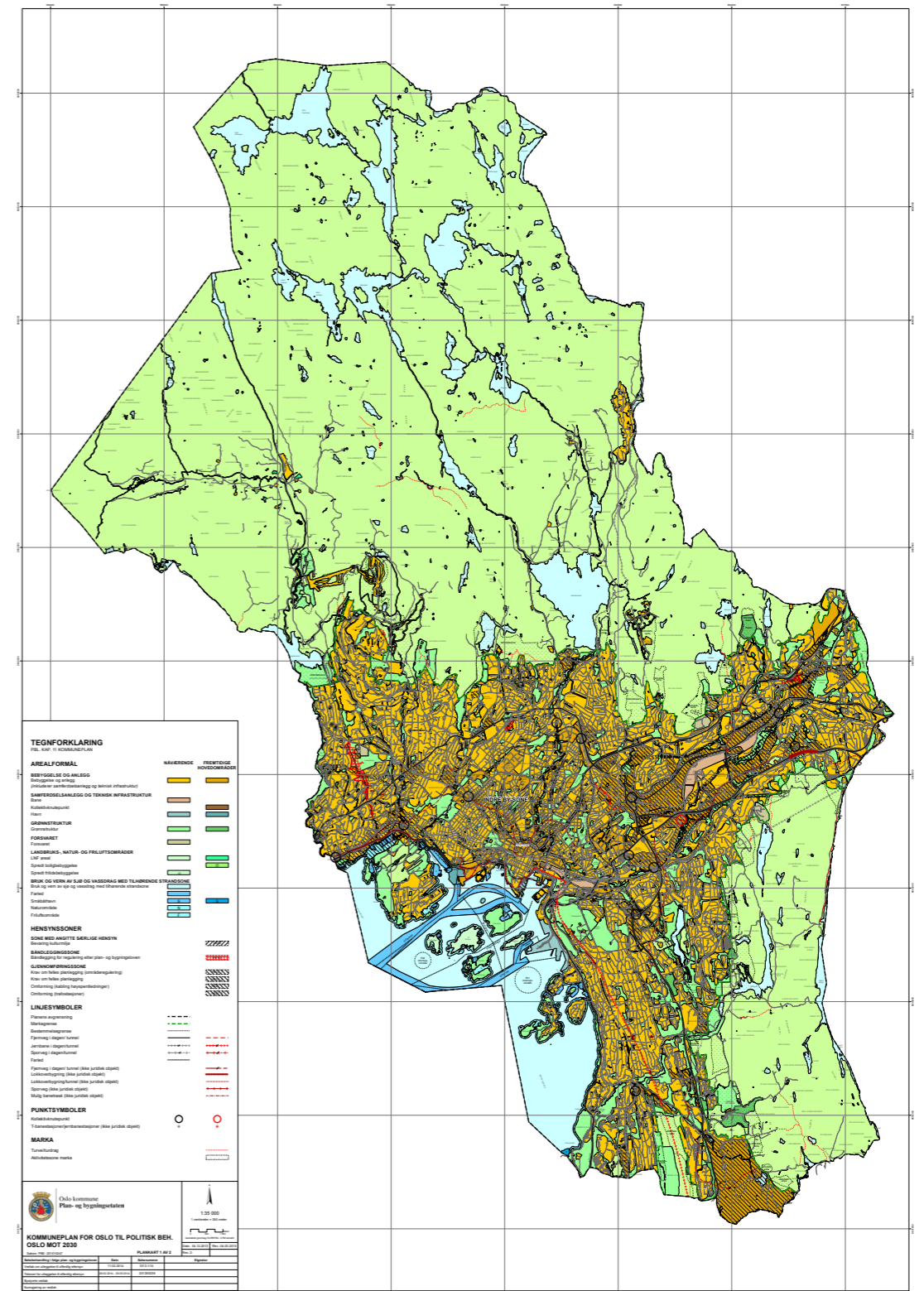
The municipal city development strategy is based on three focus areas; smart, safe and green. This strategy with its underlying objectives and goals lay the foundation for the binding land use plan (Municipality of Oslo, 2015b, p. 6). Before we look at some of these, we will look at a number of policies and plans which have been used as a foundation for the development of the municipal plan. Some of these include:

1. The Regional plan for land use and transport in Oslo and Akershus
2. National expectations to regional and municipal planning
3. Marka Act (Green land around Oslo)
4. A number of municipal policies (See Municipality of Oslo, 2015a, p. 38)
5. National transportation plan 2014 - 2023
6. Strategical public transportation plan

As we can see from the list, the regional plan we discussed before is included as a policy for making of the municipal plan. The municipal plan lists nine goals based on the three focus areas mentioned above. These are:

1. Smart
 - National knowledge capital
 - A national and international attractive city
 - Future tasks shall be solved smarter
2. Safe
 - Safe, open and accessible city
 - Safety to obtain municipal services with quality
 - Everyone shall have the possibility to a good and active life
3. Green
 - Leading international environmental city
 - Strengthen Oslo’s green character
 - Growth through compact city development and rail based densification

The development strategy has the goal of contributing to create a smarter, safer and greener city when we reach 2030. It is important to make changes which is conform with the urban, natural and historical qualities the city has. It is important that the land use planning contributes to creating good living environments with areas for activity and recreation which reduces the local air pol-



ill. 6 Municipal plan (Municipality of Oslo, 2015b)

4.1.3 Area zoning plan for Filipstad area

The area zoning plan for Filipstad is a plan which has been in the planning process for a long time, but is finally coming together as a land use plan after many changes in the land use. It is however important to note that this plan is a proposal which was sent for political discussion. The area is around 450 000 sq. m. including water areas. The area is planned to have some thousand dwellings and workplaces, a tram line, pier for cruise ships, new school and kindergarten, 90 000 sq. m. open space and 40 000 sq. m. of this regulated to a huge park and harbour promenade along the waterfront (Municipality of Oslo, n.d.).

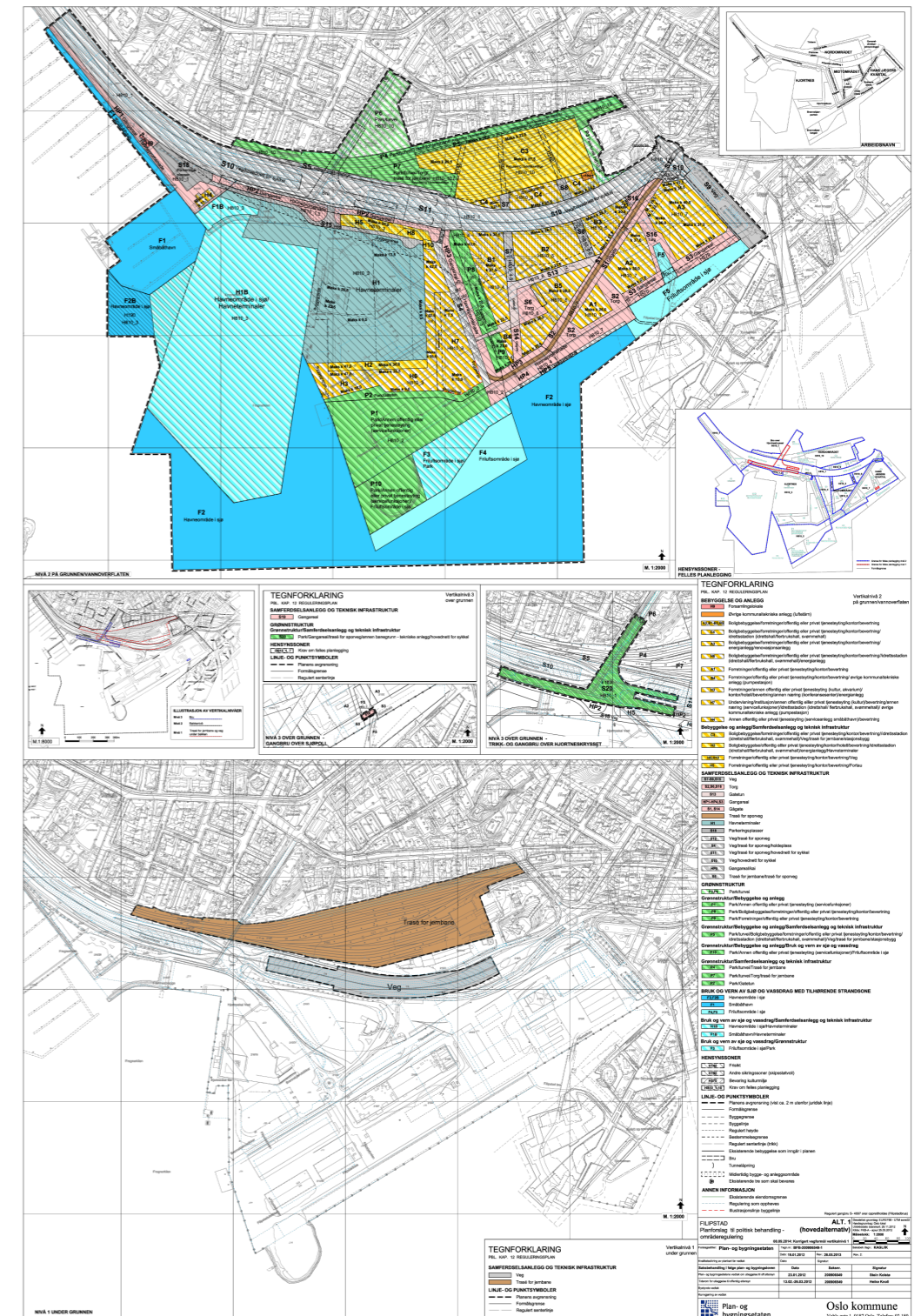
Filipstad is one of the pieces in the municipal sub-plan for the seafront established in the 80s. While many of the areas stated in the sub-plan are under construction or finished, a few remain and Filipstad is one of these. In the quality assurance program for the area it is listed eight central structuring elements (Municipality of Oslo, 2014):

1. E18 tunnel, Ring I and main bike road
2. A cohesive harbour promenade
3. Wide streets which connects the city “behind” with the fjord
4. Fjordpark as a destination
5. Urban space with different character and size
6. Urban streetscape with connection to the existing city
7. A pedestrian network
8. Fjord tram

Where do we see Green Growth indicators and green growth conform land use categories and zones requiring special considerations in the area zoning plan?

1st Indicator
 How is environmental and resource productivity of the economy shown in the area zoning plan? The materials to be used in the project are required to have low amounts of greenhouse gas emissions with healthy characteristics. This includes reuse of demolition materials locally, and the new buildings shall have low energy usage and be of materials which is flexible in the use and which can be reused well. Also when designing the buildings, facilities, major transport infrastructure and technical infrastructure climate effective choices shall be made (ROM Eiendom, 2013). Charging stations for electric cars and a zero vision for energy usage are also things that are envisioned for the area.

2th indicator
 How is the natural asset base shown in the area zoning plan? The landscape and vegetation in the area shall be varied and enhance biological diversity. The depth of the earth should be sufficient in order to create good growth foundation. Moreover, a cohesive green area/park belt with hiking possibilities and biological corridors for flora and fauna is to



ill. 8 Filipstad Area Zoning Plan

be developed (Agency for Planning and Building, 2013, p. 20).

3th indicator

How is the environmental dimension of quality of life shown in the area zoning plan?

The green structure in the area explains several initiatives to safeguard the air quality, prevent dust and particles and ensure stormwater management. Prevent emission from cruise ships by connecting them to shore powers when the ships is docked. Parks and footpaths shall be accessible to everyone. The street system is designed in order to prevent car transportation and parking. Instead it focuses on bringing public transportation, bikers and pedestrians into the area (ibid. p. 21).

4th indicator

How is economic opportunities and policy responses shown in the area zoning plan?

No explicit indicators.

Land use categories

By looking at the land use plan one can immediately see the amounts of green land in the project used for parks, paths and outdoor recreation which has its positive effects. However, we also see the land use category for a tramway, which is an indicator showing more environmentally friendly ways of transporting people to and from the area than the use of car.

Zones requiring special consideration

We find a few areas which are regulated to preservation of cultural environments and free sight (for an unobstructed view).

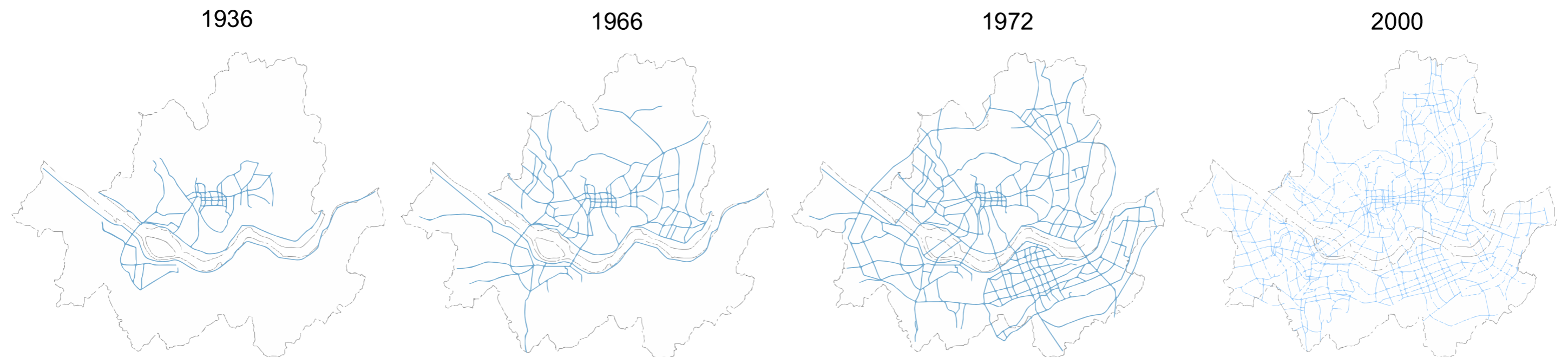
4.2 South Korea

In South Korea we will look at the national plan, a provincial plan, a metropolitan plan, an urban management plan and a district-unit plan. Again we will start from the top level plans and move chronologically down to the bottom level plans. The plans which will be investigated below are different instruments of the planning system, and have different functions. The national plan can be referred to as a national policy and show strategic land use patterns as it lays a foundation for more detailed and strategic plans. It is strategic in its form and gives guidance to central and local governments and enterprises for territorial de-

velopment, directions for policy implementation, and plans for various sectors, including industry, transportation, and housing (MOCT & KRIHS, 2001, p. 12). It has however no strong spatial dimension. The provincial plan can be defined as a plan with strategic land use patterns and strategically points out areas which should be further developed or protected. Nevertheless, specifications need to be prepared more thoroughly through detailed planning instruments. One could say it is more detailed than the national plan, yet very strategic in its form. The metropolitan plan can be defined as both a strategic land use

pattern and framework (master plan). The plan points out specific locations to be developed and protected for the metropolitan area, and is regulated in more detail in lower level plans. It also is a framework plan in the sense that it identifies the pattern of land use on a more local level, and is more specific in pointing out locations on a detailed map compared to the strategic land use pattern instrument. Still it does not give development rights, this is done at the lower level. At the local level we will investigate the urban management plan and district-unit plan which can both be defined as regulatory instruments. The urban

management plan promotes development and is a binding plan with regulatory tools such as land use categories. The district-unit plan promotes development on the very detail level, is a binding plan for future development and has regulatory tools such as land use categories and zones with special consideration. More on the difference between these two local plans will be described in chapter eight. It is rather important to note that because lack of available information, we will only look at the district-unit plan's land use categories and zones with special considerations. No description of the plan will be done.



ill. 9 Seoul Road development

4.2.1 Comprehensive National Territorial Plan of Korea

The Comprehensive National Territorial Plan (CNTP) is not one defined and detailed plan for how the land is supposed to be used, it rather focuses on setting a national vision and directing the land use for future long term development. There has so far been 4 of these plans with revisions every 5th year. The last revision is for the period 2011 - 2020 which we will take a closer look at.

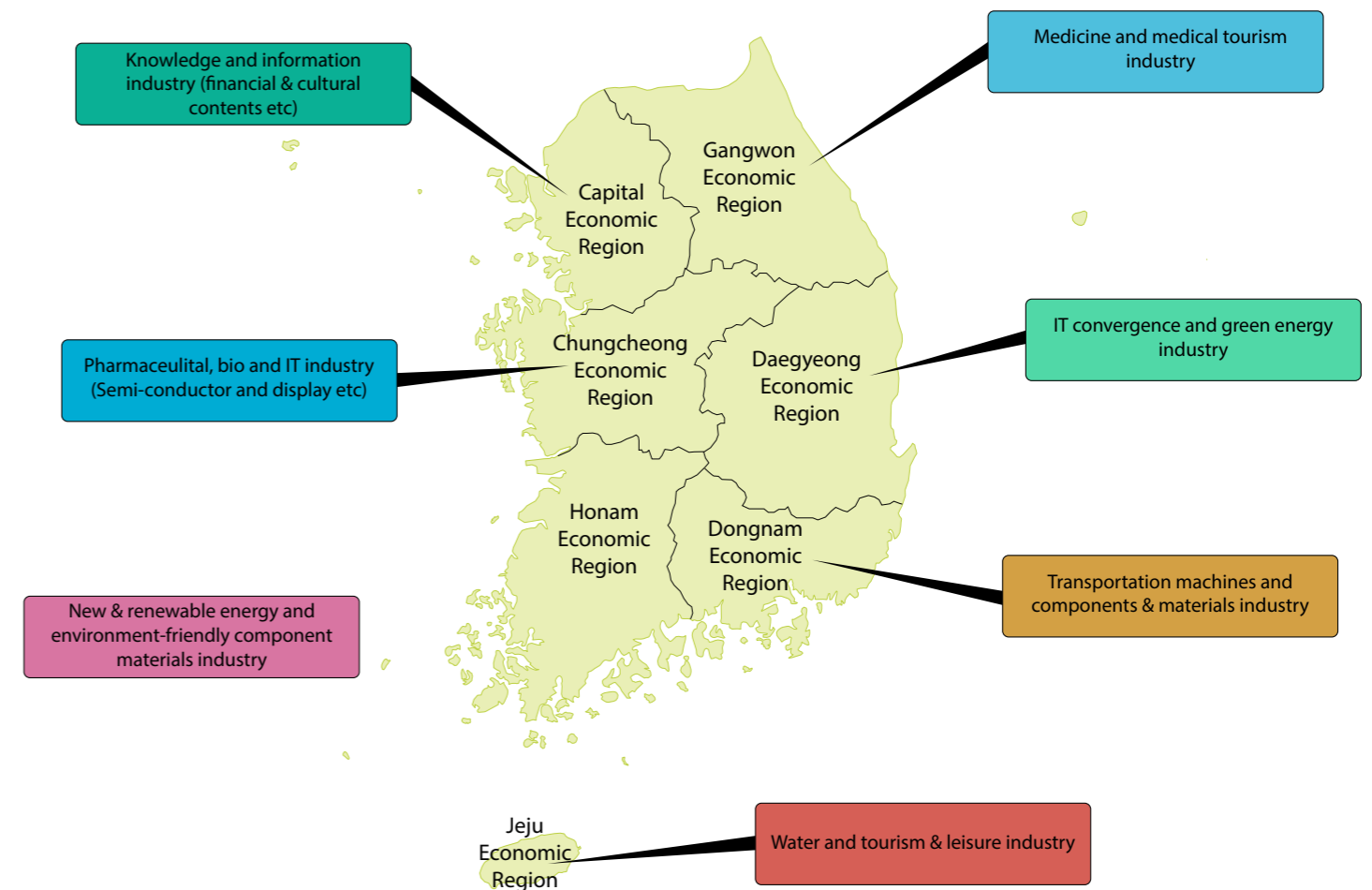
The second revised 4th CNTP (2011 - 2020) has 'Global Green National Territory' as the vision for the revised plan. The goal is to build "an open-type territorial axis centered on supra-economic regions and city-regions, centered on "5+2 economic regions" for interregional exchange and cooperation" as the geo-economic advantage Korea has in Northeast Asia (KRIHS, 2011, p. 15; Moon, Jang, Park, & Kang, 2013, p. 73). The plan has six strategies:

1. Three-tiered regional development strategy (Supra-Economic Regions, Economic Regions, and Basic Residential Areas) was made to focus on regional specialisation and interregional cooperation for boosting the national territory's competitiveness.
2. Building sustainable and safe living space in the Korean nation.
3. Building a pleasant and cultural urban environment and residential environment by

boosting urban competitiveness and pursue a cultural city with urban regeneration.

4. Decrease carbon emissions, establish energy-saving and environmentally friendly transportation policies, and building a global distribution of goods and infrastructure.
5. Strengthen international cooperation and competitiveness by integrating the management of ocean resources and the establishment of a ocean business network.
6. Manage border regions to create a base for transnational territorial management and improve the global capacity of national territory with increased exchange and cooperation with North Korea.

The economic regions is a key strategy to improve the global competitiveness in the country. It is supposed to become a base for regional specialisation which is coherent with its local contexts. The basic residential areas is a strategy improve the integration of local communities with more stable jobs and basic services as they are often shadowed by metropolitan cities. The supra-economic regions is a strategy to "deal with the global dimension of regional development as a peninsula country in Northeast Asia" and to coordinate the development between the economic regions (Moon et al., 2013, p. 78).



ill. 10 Economic Regions

Where do we see Green Growth indicators in the Comprehensive National Territorial Plan?

The difference between the 4th CNTP and other CNTP's is that economic growth and development was not the main focus. In the first three CNTP's the strategy was to build up the nation from its poor state after the Korean war. They achieved what they call the Miracle on the Han River, which is a term for Korea's economic success, and have become a developed nation. Consequently the current CNTP has the vision of establishing a 'Global Green National Territory'. The vision and the goals emphasises the balance and conservation, the quality of life and the environment has obtained a greater position than the economic growth (The focus on environment started in the 80s, but was not a main focus until the 90s. Therefore the current CNTP is stating the environment and quality of life is especially important now). Furthermore, sustainable development and conservation of national land were key elements in the 4th plan (Moon et al., 2013, p. 60). The current revised CNTP expresses the need for a global-green national territory where integration with competitiveness, sustainability with eco-friendly development, attractiveness with quality of living, and openness to the global market is of great importance. Also, to establish specialised mega economic regions to drive the global competitiveness. Green growth is not explicitly stated as a goal in the CNTP, but it is a driving factor for these things to happen. Be-

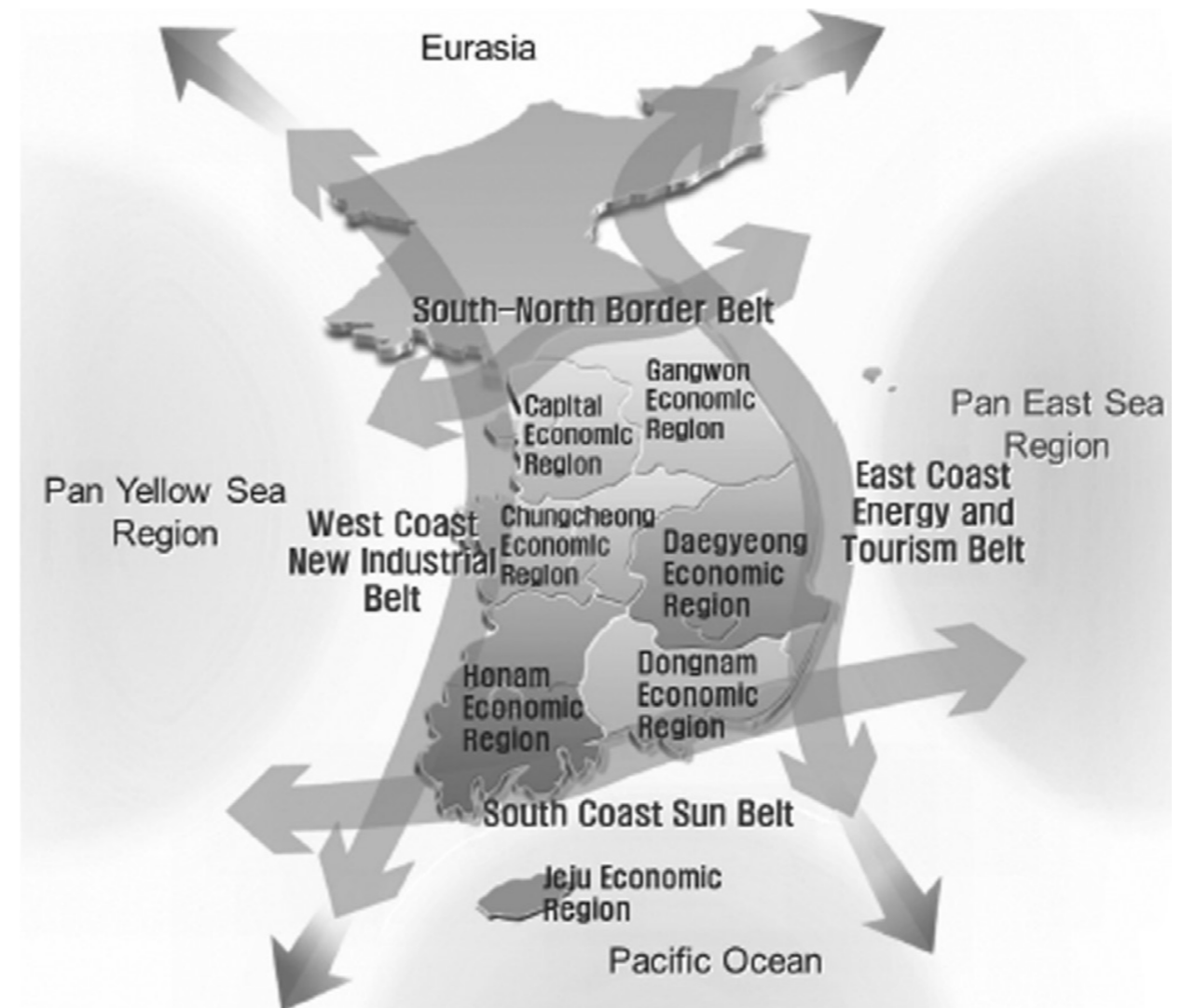
low we will look at how the four green growth indicators stated above reflects themselves in the CNTP.

1st Indicator

How is environmental and resource productivity of the economy shown in the CNTP? The establishment of energy-saving and environmentally friendly transportation policies is central as CO2 accounts for about 80% of greenhouse gas emissions. They emphasise the use of train as the best way of transporting as it is safe, energy efficient and does not pollute as much as other present alternatives. Moreover, with the introduction of a green building certification program the government wishes to expand incentives for building green, and the instalment of renewable energy facilities in buildings are to help this be achieved.

2th indicator

How is the natural asset base shown in the CNTP? An integrated territorial management for rivers, mountains and oceans will be set up such as defining pure preservation areas, buffer zones between pure reservation areas and urban preservation areas, and urban areas which are used as green space for citizens, animals and plants (KRIHS, 2011, p. 33). Through the four rivers restoration project the water quality will be improved, safe waterways in case of flood will be established, restoring the ecosystem where flora and



ill. 11 Development direction Increased international exchange and cooperation

fauna can blossom once again since the decrease as a cause of the massive economic growth few decades ago.

3th indicator

How is the environmental dimension of quality of life shown in the CNTP?

Economic regions will have city regions which will connect urban centers and the neighbouring regions for a better and effective connection. Expansion of public transportation network will make it possible to travel from an urban center to a neighbouring region in 30 minutes. Establishing an environment management system and more parks and green space will help to boost the living conditions in the city regions (KRIHS, 2011, p. 22). Most of the mentioned actions are focused on the urban places, but it is also a focus to promote green growth development and improve the life quality in rural areas. This includes utilization of biomass and other renewable energy. The four rivers restoration project also increases the citizens accessibility to the rivers where recreational and cultural places will be created in order to improve the quality of life (KRIHS, 2011, pp. 9, 34).

4th indicator

How are economic opportunities and policy responses shown in the CNTP?

The first strategy list policies which can help to nurture industries in the economic regions by supporting them and helping to relocate them.

The use of land use plans can help this strategy come to completion and being able to set the necessary conditions in order to strengthen research, foster innovation and use of new technology production. Creation of intelligent transportation systems to reduce carbon emissions (KRIHS, 2011, p. 8).

4.2.2 Gyeonggi Provincial Comprehensive Plan

There are a number of different regional plans in Korea such as transportation plan, culture and tourism plan, specific region plans etc. A more indepth look upon the regional and sector plans will be discussed in chapter 8. A more central and leading plan is the Provincial Comprehensive Plan which every provincial administration is required to make. The plan is, similar to the CNTP, quite strategical and with few detailed land use specifications. It does however focus on how the province can work better and find a development vision and strategy for the future development. It does not have a set period as it adapts to the updates of the comprehensive national territorial plans. There is however one province which has never been able to make their own provincial plan since 1980, as the national interests were bigger, and the central government instead made Seoul Metropolitan Area Readjustment Plan which included Seoul metropolitan city and Gyeonggi province. The first provincial plan for Gyeonggi province was approved in 2012, and this is the plan we will take a closer look at.

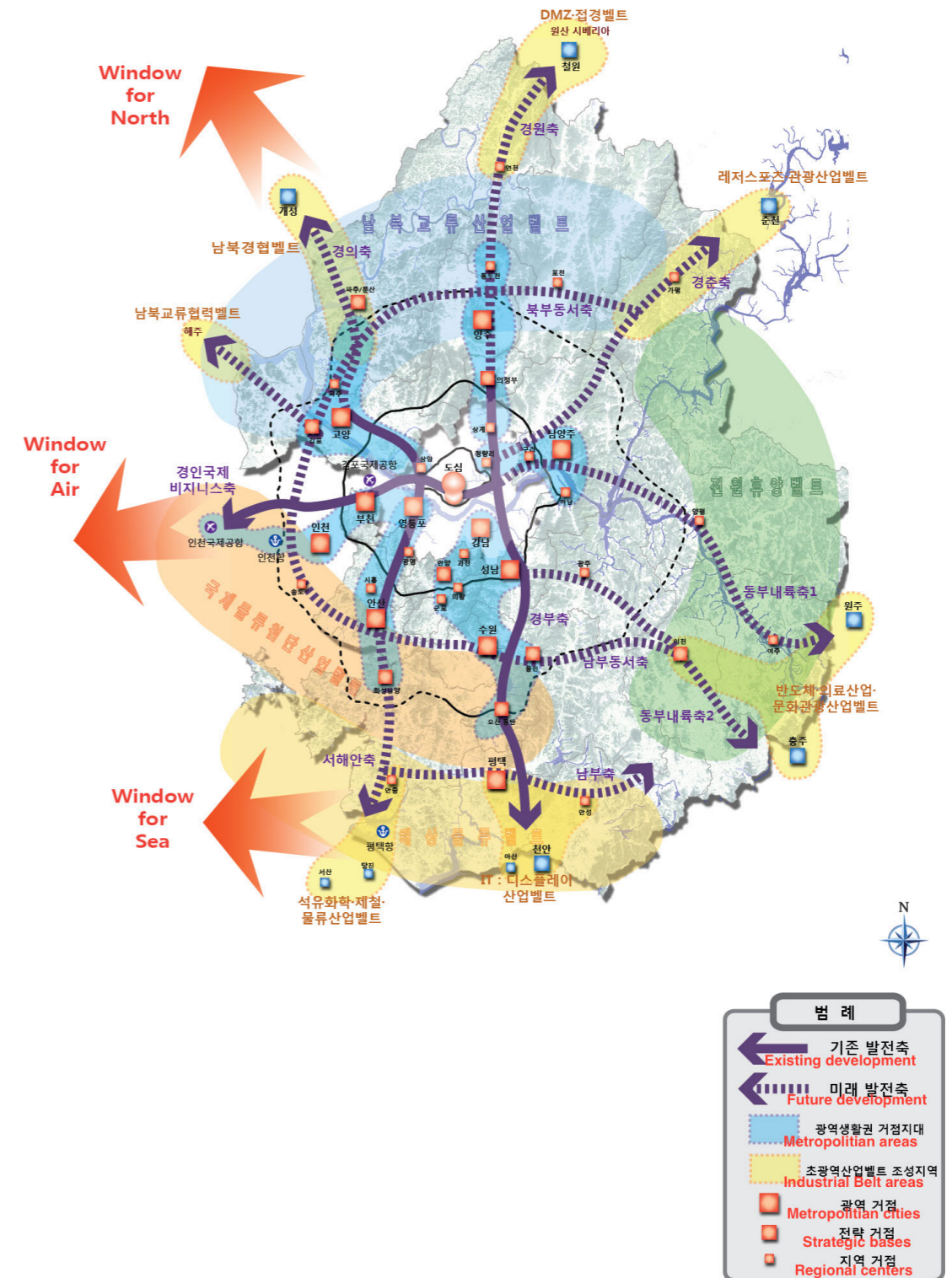
The Gyeonggi Provincial Comprehensive Plan (2012-2020) differs from the CNTP because it is more specific to the development projects of the province. However, the provincial plan has basically followed the CNTP, and is required to do so as well. Although many of the strategies are the same, they are more detailed than what we have seen in the national plan. The vision of the province is 'Center of a Harmonious Pan-Yellow

Sea Bloc', which is the ideal objective to reach (Gyeonggi Province, 2012a). There are four goals presented in the provincial plan:

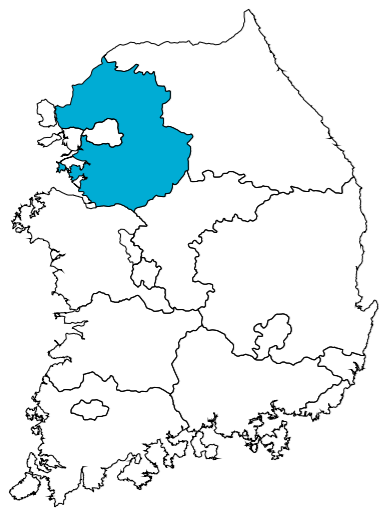
1. A region leading national growth
2. A welfare community guaranteeing the well-being of residents
3. A healthy green community
4. A region of desirable cultural life

In trying to achieve these goals they have set up seven strategies which are necessary to achieve in order to reach the goals. These are as follows:

1. The Creation of a Global Education, Science and Research Belt
2. The Creation of a Strategic Special Zone for New Growth Industries in Yellow Sea Coastal Areas
3. The Creation of a New Growth Valley in Northern Gyeonggi Province
4. The Creation of a Creative City as an East Asian Cultural Hub
5. The Expansion of the Metropolitan Railroad Network and the Development of a Railway Station Sphere
6. Economic Cooperation between South and North Korea and the Creation of a Founda-



ill. 12 Provincial comprehensive plan (Gyeonggi Province, 2012b, p. 27).



tion for National Reunification

7. The Establishment of Smart Spaces for the Realisation of Low-carbon Green Society

Where do we see Green Growth indicators in the Provincial Plan?

1st Indicator

How is environmental and resource productivity of the economy shown in the Provincial Plan? A goal is to reduce the greenhouse gas emissions by 30% and changing the climate change by switching to low carbon green area adaption. Sustainable energy systems should be nurtured and used in green buildings and business development. Creation of energy from the waste disposal, and encouraging citizens to make efforts to live a low carbon lifestyle. (Gyeonggi Province, 2012b, p. 42). By achieving these factors they claim the can achieve low carbon green cities in the providence. The establishment of an urban, wide and effective railway infrastructure and other forms of environmentally friendly transportation methods is also set as a goal in order to reduce the dependance of private cars.

2th indicator

How is the natural asset base shown in the Provincial Plan? Sustainable management of water resources and the waterfront to prevent against climate changes

and its consequences. Building of a demilitarised zone (DMZ) peace and ecology belt to enhance the flora and fauna in the areas by the border to North Korea, but also conservation of the ecological resources in the whole province (Gyeonggi Province, 2012b, p. 42).

3th indicator

How is the environmental dimension of quality of life shown in the Provincial Plan?

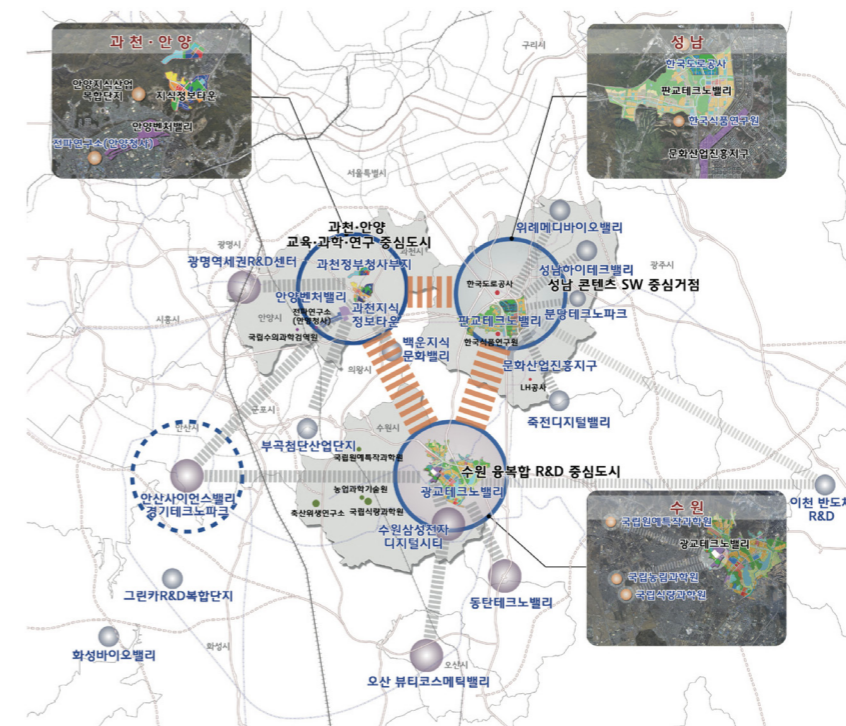
The province promotes green infrastructure and green areas in cities for the well being and healthy environment of citizens. Clean air is to be prioritised as the air quality is not great around the capital, and the establishment of green areas will contribute to this. Through the establishment of greater public transportation in terms of more focus on railway, better transfer stations, more efficient bus system and wide area bike road network will make things more accessible for the citizens and will help decrease air pollution (Gyeonggi Province, 2012b, pp. 42, 44).

4th indicator

How is economic opportunities and policy responses shown in the Provincial Plan? The first strategy sets out a plan to establish a research and development (R&D) belt between the cities Suwon, Seongnam and Anyang in the South part of the province. Each of the cities will focus on separate technology to create a R&D cluster (Gyeonggi Province, 2012b, p. 29). The second strategy is a strategy from the CNTP

where the purpose is to lay the foundation for green growth engine industries along the coastline. Moreover, the creation of academic and industrial clusters is an initiative to improve transition from school to work. Also with the great development of infrastructure and public

transportation, there is a need for innovation of better and more effective telecommunication and administration of transportation (Gyeonggi Province, 2012b, p. 44).



ill. 13 R&D belt between Suwon, Seongnam and Anyang (Gyeonggi Province, 2012b, p. 29).

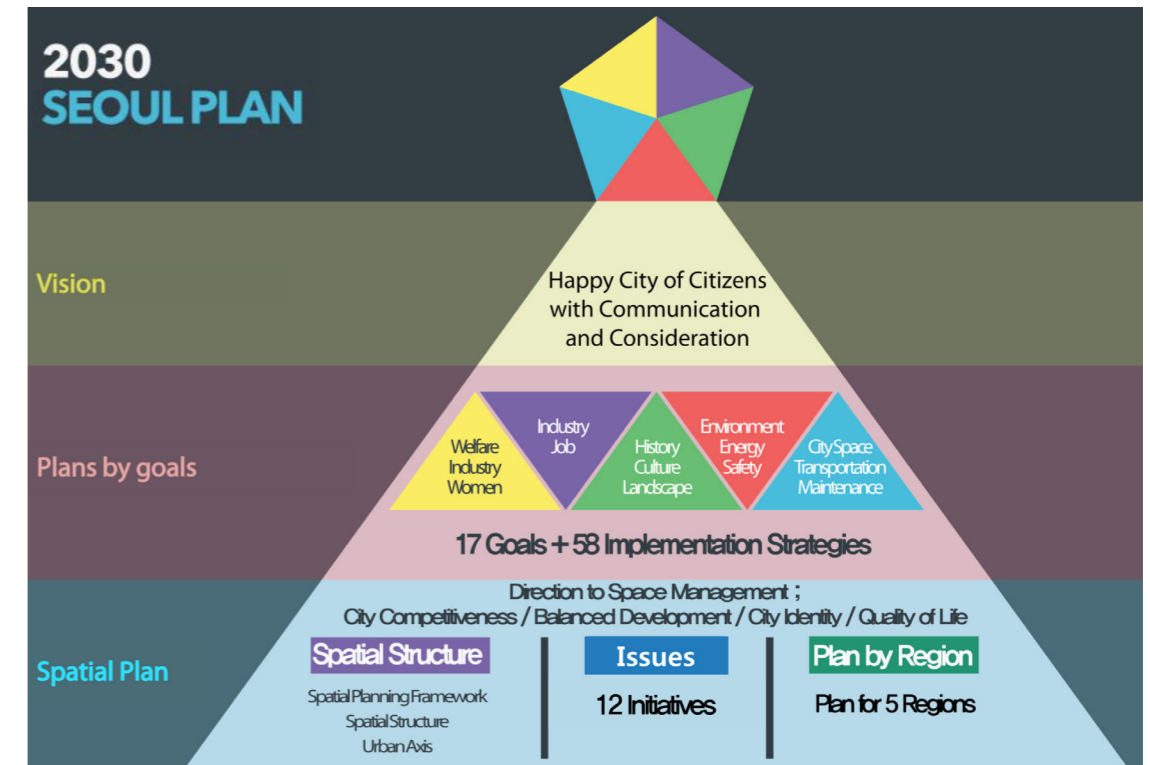
4.2.3 Seoul Metropolitan Plan for 2030

The metropolitan plans in Korea have the same importance as provincial plans even though provincial plans cover a substantial larger land area. The reason and history for this will be discussed in greater detail in chapter eight. When Seoul metropolitan city formulates a land use plan, in many ways it sets the standard for how other cities and provinces make their Master plan or Provincial plan. Seoul has done many great things before the central government has asked them to do so. Consequently, several local governments look up to the special metropolitan capital city. The metropolitan plan's purpose is to recognise the common interests in spatial development and interregional infrastructures with neighbouring authorities (OECD, 2012, p. 107).

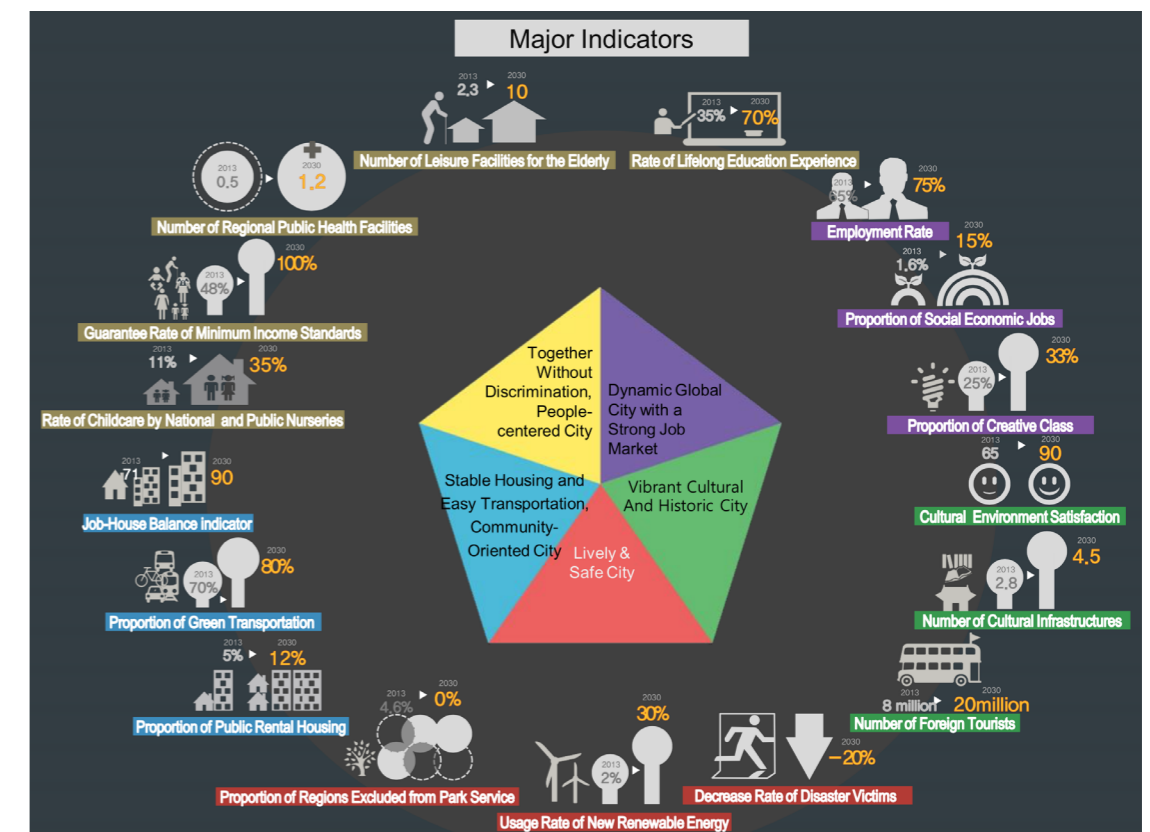
The Seoul metropolitan master plan consists of an analysis of the current status, change and development direction the city should take, vision, goals and plans to reach the goals, land use plans with strategies and how to put the changes into practice. The current master plan has the vision 'Happy City of Citizens with Communication and Consideration'. The reason they picked this vision is to emphasise that communication and consideration can solve different problems and create a better city for the citizens (Seoul Metropolitan Government, n.d.-a). Out of this vision they created 5 general goals with secondary objectives and strategies centered on five categories:

I. Welfare, education and women: Together

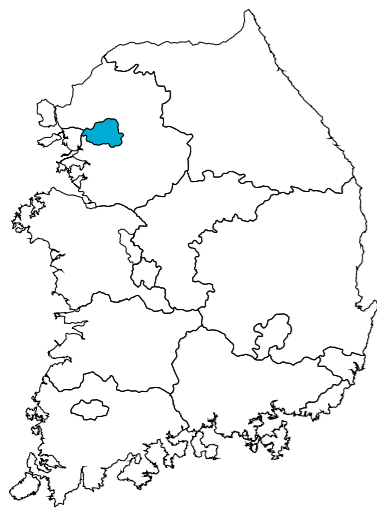
- without discrimination, a people centered city
- Welfare system in response to the ageing society
 - Healthy city
 - Well Integrated social system without discrimination
 - Opportunities for education available for everyone
 - Gender equality and social care
2. Industry and job: Dynamic global city with a strong job market
 - Global economic city based on creativity and innovation
 - Synergic growth among economic units, co-development among regions
 - People and job centered vital economy
 3. History, culture and landscape: Vibrant cultural and historic city
 - Historic city where culture and life are integrated
 - City landscape that moves the minds of citizens
 - Diverse city cultures for everyone to enjoy
 4. Environment, energy and safety: Lively and safe city
 - Park oriented ecological city
 - Energy efficient resource recycling city
 - Creating a safe city for everyone
 5. City space, transportation and maintenance: Stable housing and easy transportation, a community oriented city
 - Urban regeneration for harmony between



ill. 14 Overview over the Seoul plan



ill. 15 Indicators to measure achievement



life and work spaces

- Green transportation environment for a convenient life without cars
- Provide various choices for stable housing

The different goals have listed some major indicators to monitor whether they are able to achieve the goals they have set for the planning period, we will be using OECD Green Growth indicators. However, as we see from the different goals they are not focused on land use, rather how the city should develop for the better future of its citizens. Nevertheless, these goals have shaped the spatial plans we will take a closer look at. The four strategical directions the master plan makes toward directing the space are:

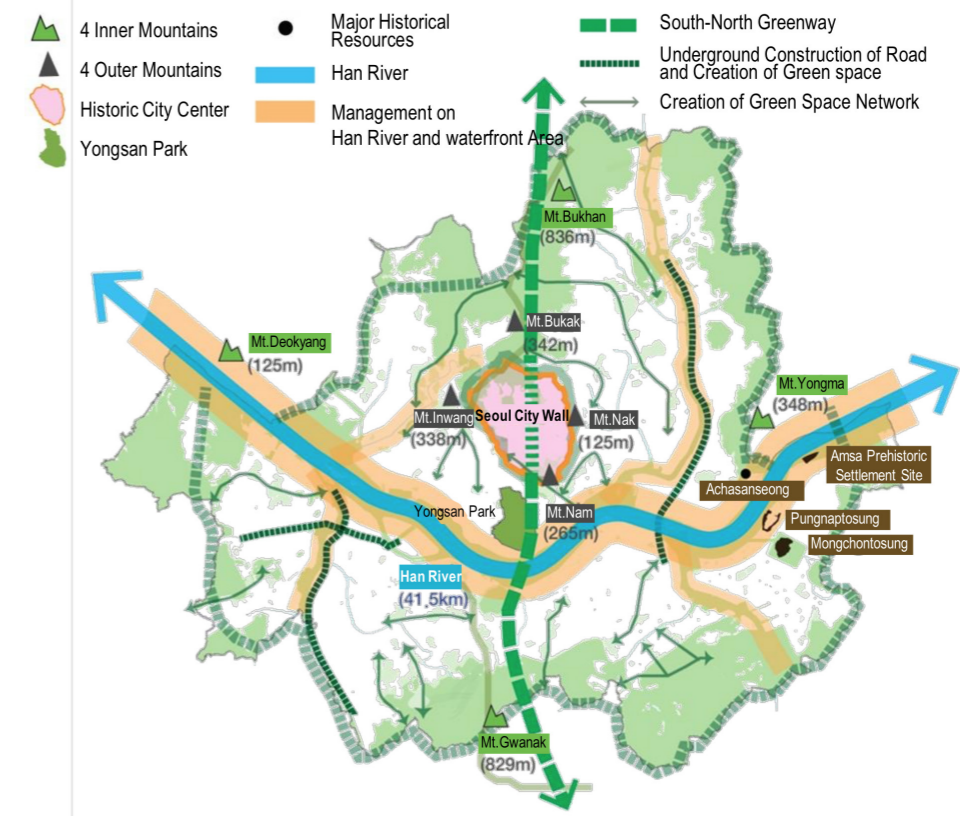
1. To recover and strengthen the identity of Seoul
2. Balanced specialised growth development of 5 regions
3. Strengthen global competitiveness of the metropolitan area
4. Innovative improvement of citizens' living environment

To reach these strategical directions they established three frameworks to work from. Before looking at the strategic directions we will take a quick look at the three frameworks:

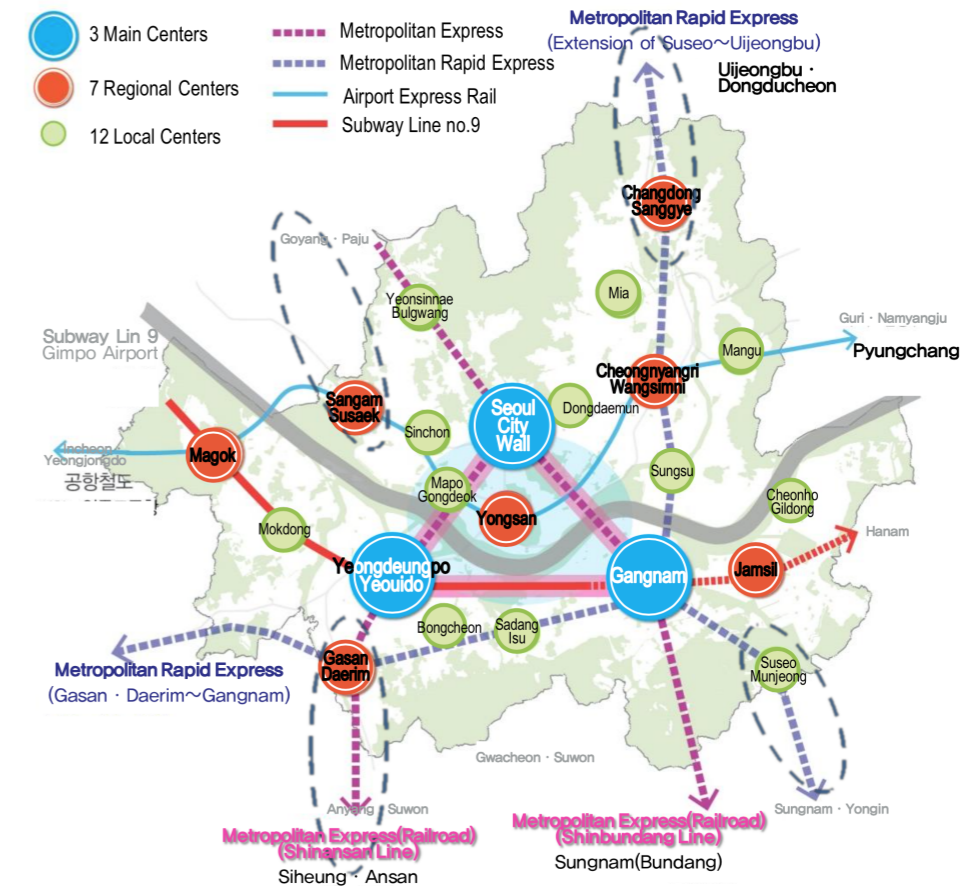
1. Respect of Seoul's unique natural and historical heritage

2. Readjustment of the spatial structure of Seoul for enhanced city competitiveness and balances development
3. Establishment of city axes for communication and mutual development

The first framework has the idea that one should respect the cultural and natural heritage which has been passed on through generations and the city space it has created. The four inner mountains in the city of Seoul have a long history where the Seoul city wall surrounded these mountains for several hundred years, and still do to some extent. The four outer mountains which surround the whole city of Seoul has defined its geographical borders which should be respected. The river and branch streams are also to be considered important natural features of the city of Seoul. Consequently, these features should be respected in all spatial development. The second framework established three main centers, seven regional centers and twelve local centers. Since 1990 Seoul has had one main center, five sub-centers and eleven local centers. The motive for changing the strategy is for improving competitiveness, self sufficiency and balanced development among the regions of the city. The three main centers are the historic center, financial center and business center. The seven regional centers have their own specialised function with focus on different fields. The third framework established city axes to create a better connection between centers and



ill. 16 Development strategies related to cultural heritage



ill. 17 Centers with special function

mutual development with neighbouring cities. The framework lists the transportation, development and greenway axis. The transportation axis connects the three main centers, the regional and local centers. The development axis forms the basis of where future development and redevelopment should be carried out. The greenway axis forms a shape of where green spaces should be prioritised and not development (Seoul Metropolitan Government, n.d.-b).

Based on these frameworks and the four strategic directions listed above the plan lists twelve initiatives to how the four directions should be achieved.

1. To recover and strengthen the identity of Seoul
 - Special management of natural and historical culture area
 - Create Seoul's unique city landscape
 - Strengthen the park and greenway network
2. Strengthening the global competitiveness
 - Bring international enterprises and expand the businesses infrastructure to the three main centers
 - Promote the metropolitan innovation cluster
 - Strengthen the wide area transportation foundation

3. Balanced specialised growth development of 5 regions
 - Enhance the foundation for self sufficiency by region
 - Regenerate isolated and underdeveloped areas
 - Create a general solution for regional disparity
4. Innovative improvement of citizens' living environment
 - Manage the regional characteristics by neighbourhood units
 - Establish a sustainable housing maintenance system
 - Expand the living infrastructure such as culture and welfare

Lastly having discussed the overall framework and initiatives that need to be carried out we will look at the detailed region plans for the city. The master plan divides Seoul into 5 different regions with different focus areas. The five regions are the city center, northeast, southeast, southwest and northwest region.

Where do we see Green Growth indicators in the master plan?

In terms of land use planning the master plan shows more detailed directions compared to the CNTP and the provincial comprehensive plan. However, it does not allocate a detailed land use

plan for each region. Instead, it emphasises that the general frameworks and initiatives should be achieved in each region. The master plan of Seoul has many issues they are wanting to change with these initiatives. The initiatives are used in deciding what to do with each region and what specialisation each region should focus on for the future. Although Green Growth is not explicitly stated in the plan, there are a number of things that are directly related to the core of green growth. Transport is one of the main focuses in the Low Carbon Green Growth act, which we discuss later. Moreover, the Seoul government has a local action plan for green growth which we will return to later. Below we will look at how the four green growth indicators reflects themselves in Seoul's master plan.

1st indicator:

How is environmental and resource productivity of the economy shown in the metropolitan plan? In the plans for the five regions they emphasise the management of transportation demand as an important factor for creating a better transportation system. Examples of measures are such as low emission zones (where old heavy polluting vehicles can't drive through unless they pay a fine), congestion fee system and management of parking demand. With the establishment of a railroad centered public transportation system to the three main centers and the regions, expansion of the bus-lane system in the historic city center and reorganisation of the bus route sys-

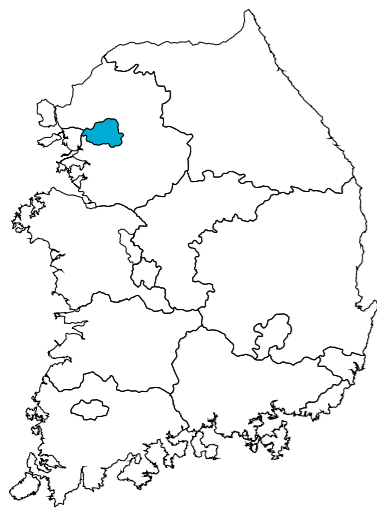
tem will make it more efficient and fast alternative to transportation. One of the goals also lists that a green transportation environment should be established in order to secure a convenient life without cars. Another desire is to create an energy efficient resource recycling city (which have stated in a few areas already).

2th indicator

How is the natural asset base shown in the metropolitan plan? The preservation of historical and natural elements in Seoul is emphasised several times, especially the four inner and the four outer mountains and the Han-river with its branch streams. The establishment of a green axis through the city plays a central role in bringing back the green which has been lost to the growth of the city through the year (Seoul Metropolitan Government, n.d.-b, p. 47). To improve the citizens accessibility to green areas in the city they are planning to establish parks and expand green areas in regions with a lack of green land.

3th indicator

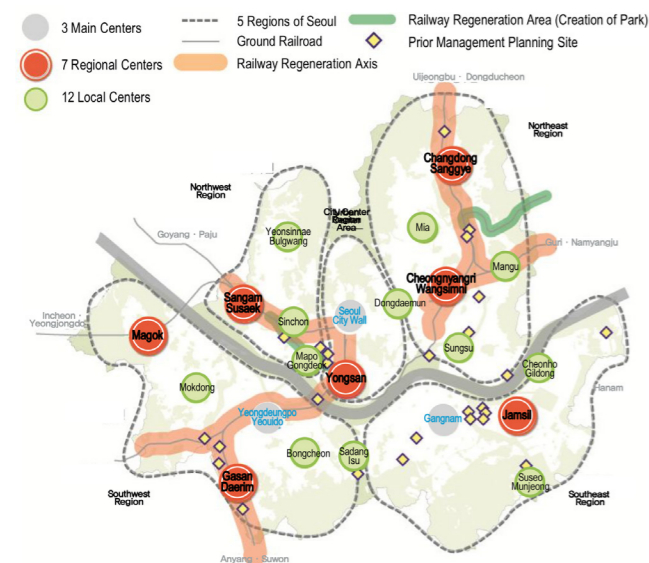
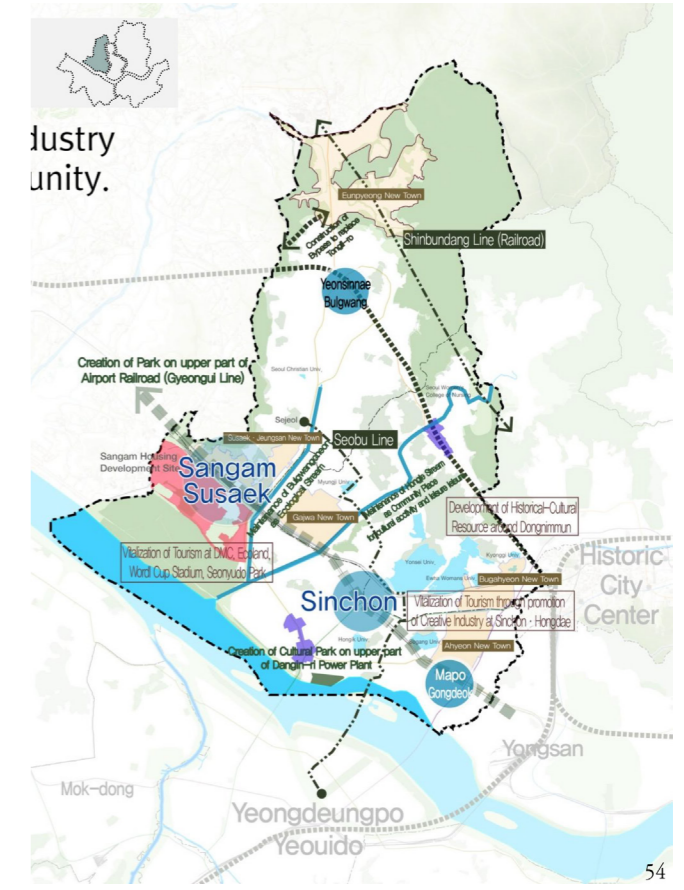
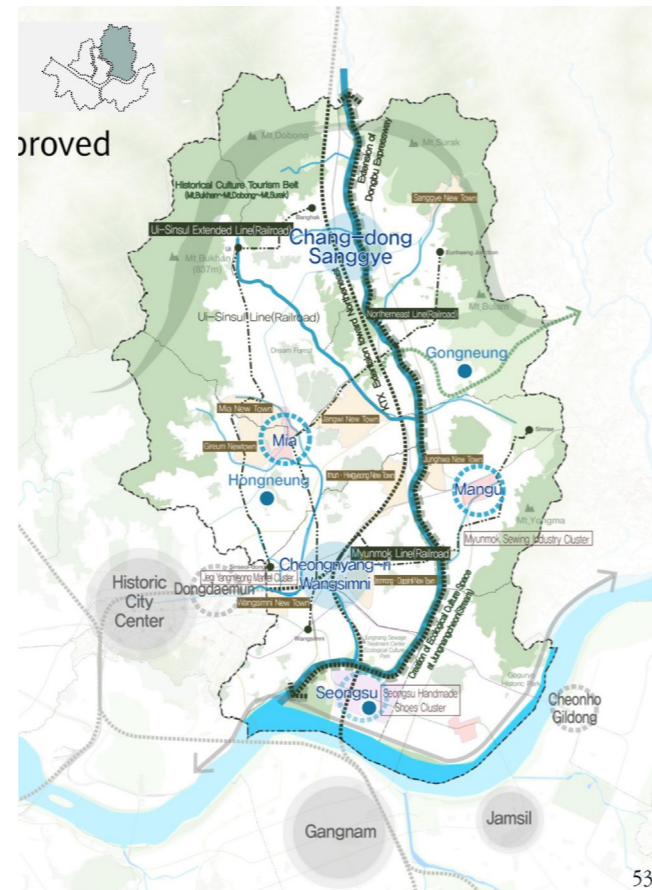
How is the environmental dimension of quality of life shown in the metropolitan plan? The use of the city's parks for education, festivals, urban agriculture, culture and other events in order to bring people together (Seoul Metropolitan Government, n.d.-b, p. 47). The enhancement of transportation for more effective and sustainable public transportation is an important factor



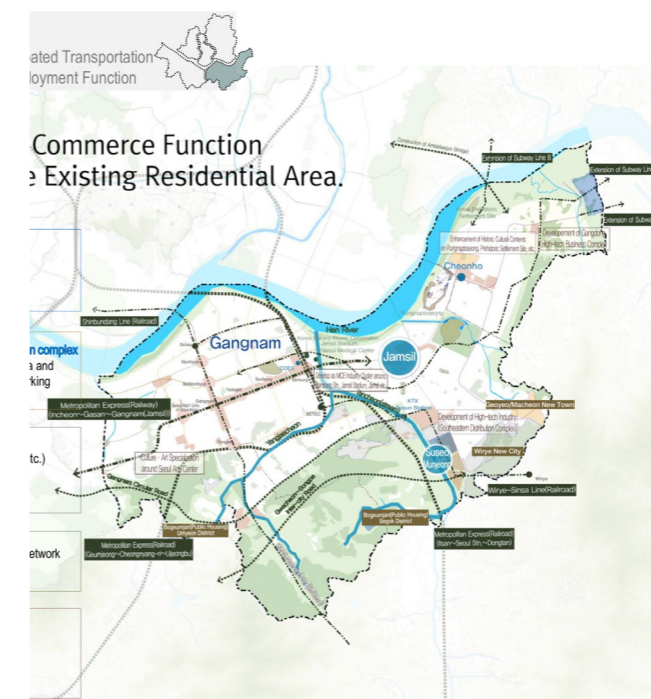
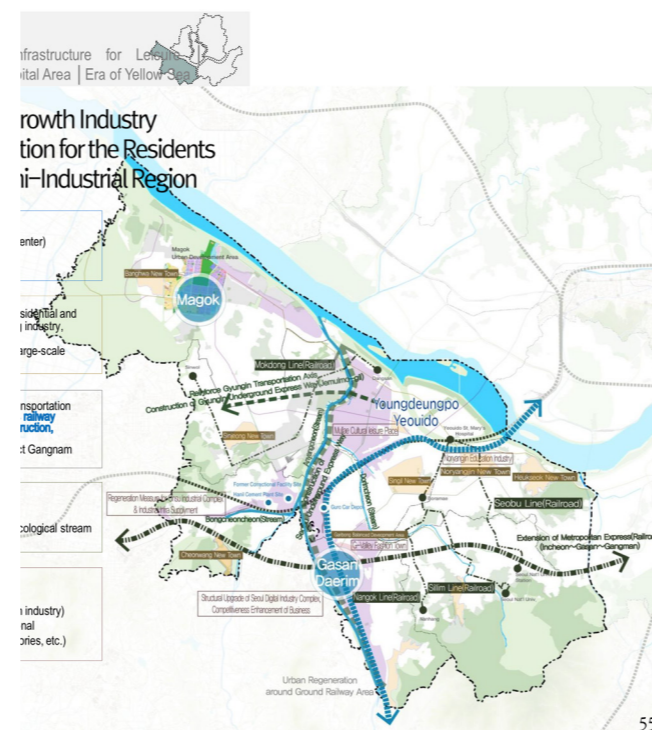
considering how many people travel to the city centre for work and leisure.

4th indicator

How is economic opportunities and policy responses shown in the metropolitan plan? The different regions will have different specialisations which they will develop further. The three major centres defined in the framework for the plan is carried out by giving these special functions, Yeongdeungpo - Yeouido focus on an international financial center, Seoul City Wall area focus on an international cultural center, and Gangnam focus on becoming a international business centre all which can attract international enterprises.



ill. 18 Centers with special functions initiatives



ill. 19 Development in the 5 different regions

4.2.4 Urban management plan for Magok area

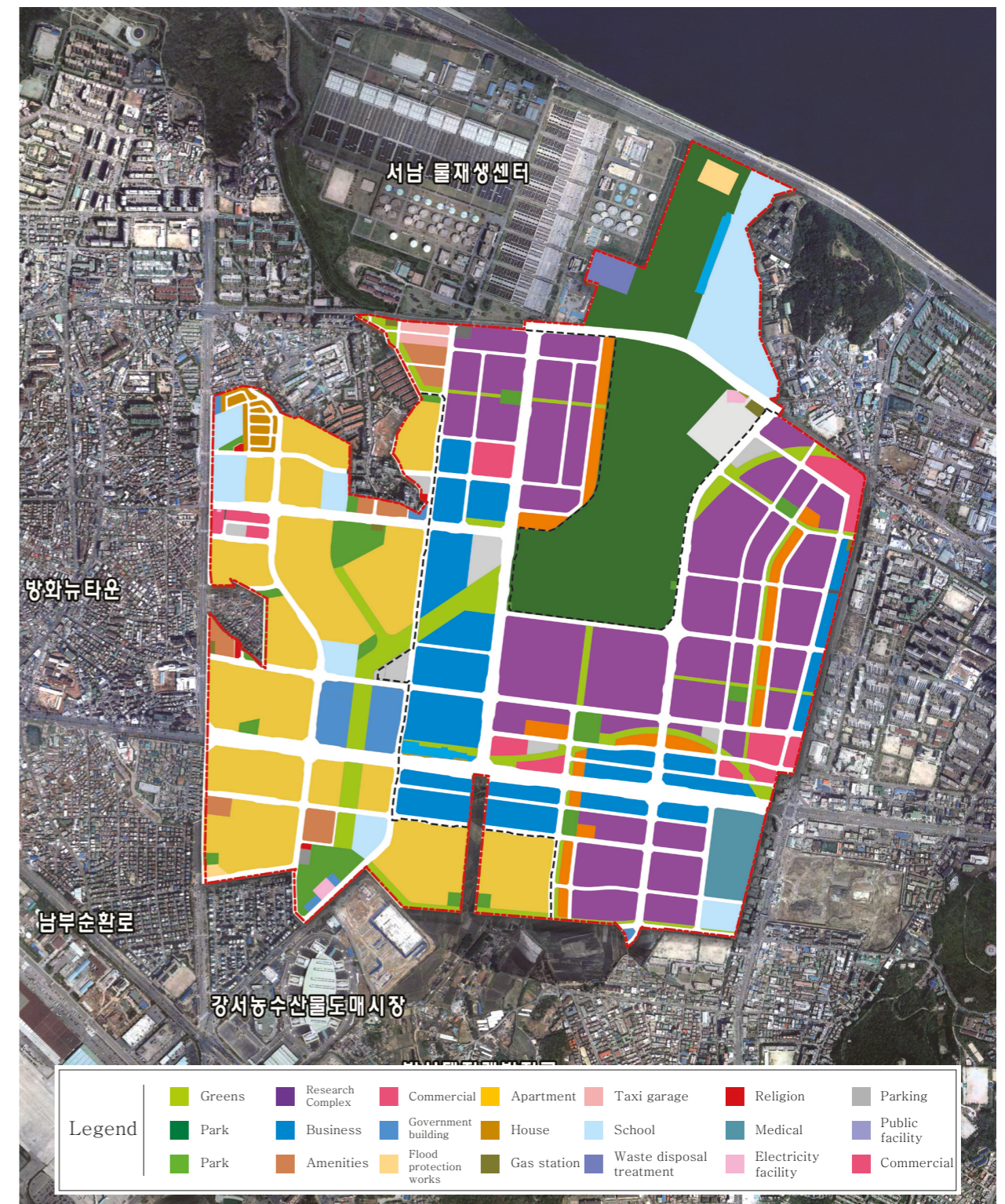
The urban management plan is used for executing more strategic views from the plans higher up in the system. The national, regional and metropolitan plans should be included as a base for establishing the urban management plans. The urban management plan is however, much more detailed in showing what the land actually will be used for, and less in showing strategies for how land can be used.

The legally binding urban management plan for Magok is one of the last vast plans for development in the Korean capital. The area can be seen on the Southwest region map in Seoul's strategic plan for the region (presented above). The goal for the development is to "create a future knowledge industry complex and international business complex that will develop Seoul into the core city of Northeast Asia" (SH Corporation, n.d.-d). The master plan for Seoul mentioned that the Southwest region will focus on knowledge-based industry, this is exactly what they are trying to achieve. They believe by having an area which has a research function, production function, education and training function, support service, living space, and surroundings for daily life will make it easier to creating knowledge efficiently.

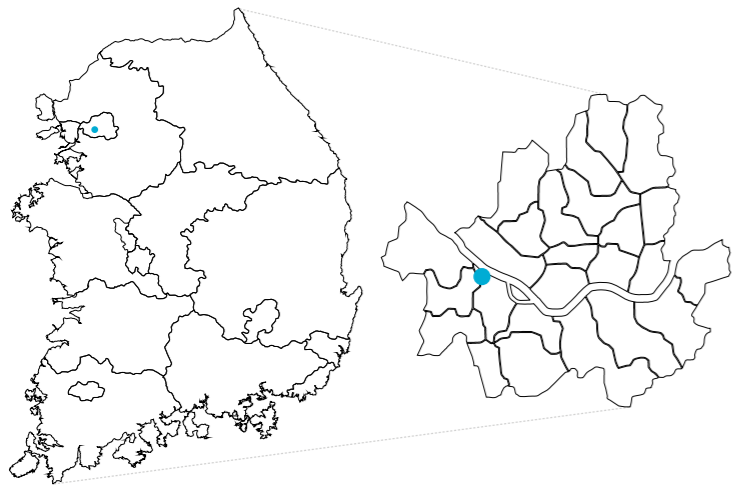
Through establishing an area with such a variety and combination of land use they believe it will help to promote fusion between high-tech industries. They have listed four development visions

for the establishment of the 'city' Magok in order to become an environmentally friendly advanced industrial complex, where high-tech industry and residential space is combined (SH Corporation, n.d.-c). These are:

1. Create the base for a Northeast Asia economic hub
 - Use Kimpo Airport to creating one-day business district with major Northeast Asian cities
 - Create a base for attracting foreign investment
2. Next-generation growth engine outpost of Seoul
 - Create a high-tech industrial cluster to attract future growth engine industries
 - Develop the new industries and create synergies through collaboration between technologies
 - Creation direction
3. Develop an environmentally friendly city model in accordance with the surrounding green land and water system
 - Create an ecological environment through connections between green spaces in the target location
 - Distribute the development land step by step
 - Move toward an environmentally friendly space development with proper density



ill. 20 Land use plan Magok



4. Promote regionally-balanced development, through the activation of southwest regions
- Magok will develop in accordance with the development of Seoul's southwestern region, in a balanced way
 - Strengthening the region's economic base, in accordance with the southwest industrial concentration regions

Where do we see Green Growth indicators and green growth conform land use categories in the urban management plan?

1st indicator:
How is environmental and resource productivity of the economy shown in the urban management plan?
The idea of this new area is for it to be environmentally friendly where innovation and research can be conducted while establishing green areas for the enterprises and population moving to the area. Consequently, the business and residential areas are required to be built where strict energy efficiency will be valued. In doing so they claim greenhouse gases in the area will have a reduction rate of 65% and up. The area is located where two subway stations and one the airport express station is located which provides more environmentally friendly transportation into the area (SH Corporation, n.d.-e). Moreover the area will be eco-friendly, and use renewable energy technologies to the greatest extent (SH Corpo-

- ration, n.d.-a). This includes:
- The area should have platinum grade on building energy efficiency according to LEED rating and use of passive buildings for less energy use. Moreover, greater insulation, reinforcement and roof planting will be used for less energy waste.
 - Use of sewage heat from the local water treatment facility, waste heat from the waste disposal treatment facility and geothermal heat and cooling from the buildings. Use of solar panels for partial electricity supply to the buildings.
 - The natural land will be built on, but parks and other expansions of the green land will help neutralise carbon, and plants with good carbon dioxide absorption will be planted.

2th indicator
How is the natural asset base shown in the urban management plan?
A green axis is to be made to connect the green areas from the South and to the North and create a cohesive green network. Furthermore, bringing green areas into the project location will foster biodiversity.

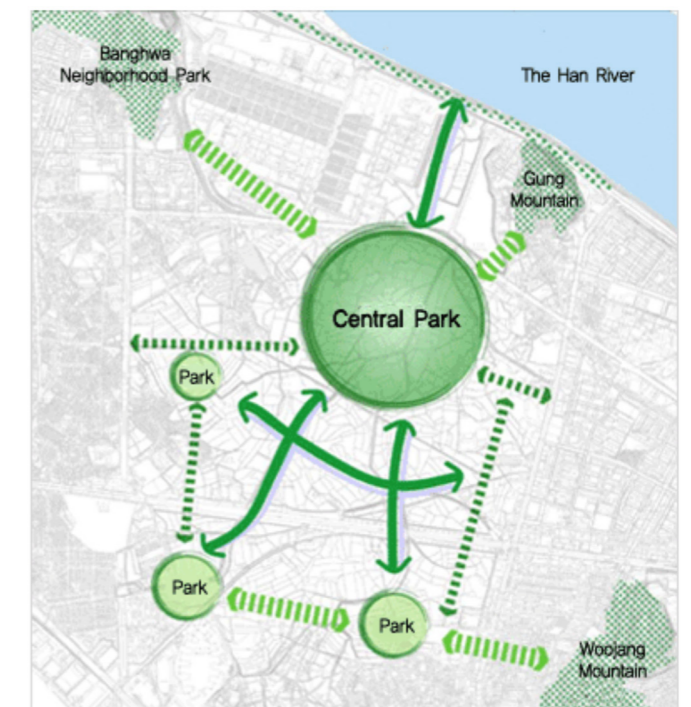
3th indicator
How is the environmental dimension of quality of

life shown in the urban management plan?
The stations already located in the area of Magok, the two subway stations and the express airport train station provides easy access to go abroad for business or leisure, but also fast connection to the city centre. Bus routes which will be established will also play a central role. The plan will provide recreation spaces by the river and with the huge park located in the middle to enhance the life quality to the citizens of the area, but also for the neighbouring areas (SH Corporation, n.d.-b, n.d.-e). Bike paths are to be made in the whole planning area along green areas to provide access to central areas.

4th indicator
How is economic opportunities and policy responses shown in the urban management plan?
The plans lay the basic foundation for the establishment of several research complexes in the area. They emphasise this establishment will pave the way for IT, biotechnology, and nanotechnology which will foster innovation and use of new technology production. The U-city (Ubiquitous city) approach this plan gives, will offer advanced ways of utilising social aspects of the area through the use of IT systems (SH Corporation, n.d.-a). An example is the use of automatic waste collecting system.

Land use categories
From the look at the land use plan one can immediately see three land use categories which

are directly related to the green growth strategy. This is the greens, the two park types (one which shows the central park of the area), and lastly the research complex. The greens and parks bring quality of life to the people and helps neutralise carbon, while the research complexes help the fostering innovation and use of new technology as stated in the 4th indicator. The waste disposal treatment land use category is also an important factor for effective use of energy as stated in the 1st indicator.



ill. 21 Park and green strategy

4.2.5 District-unit plan

The district-unit plan is the lowest level of plan in Korea. The land use categories and zones requiring special consideration will be the factors for the analysis on this plan as information on established district-unit plans has been unavailable.

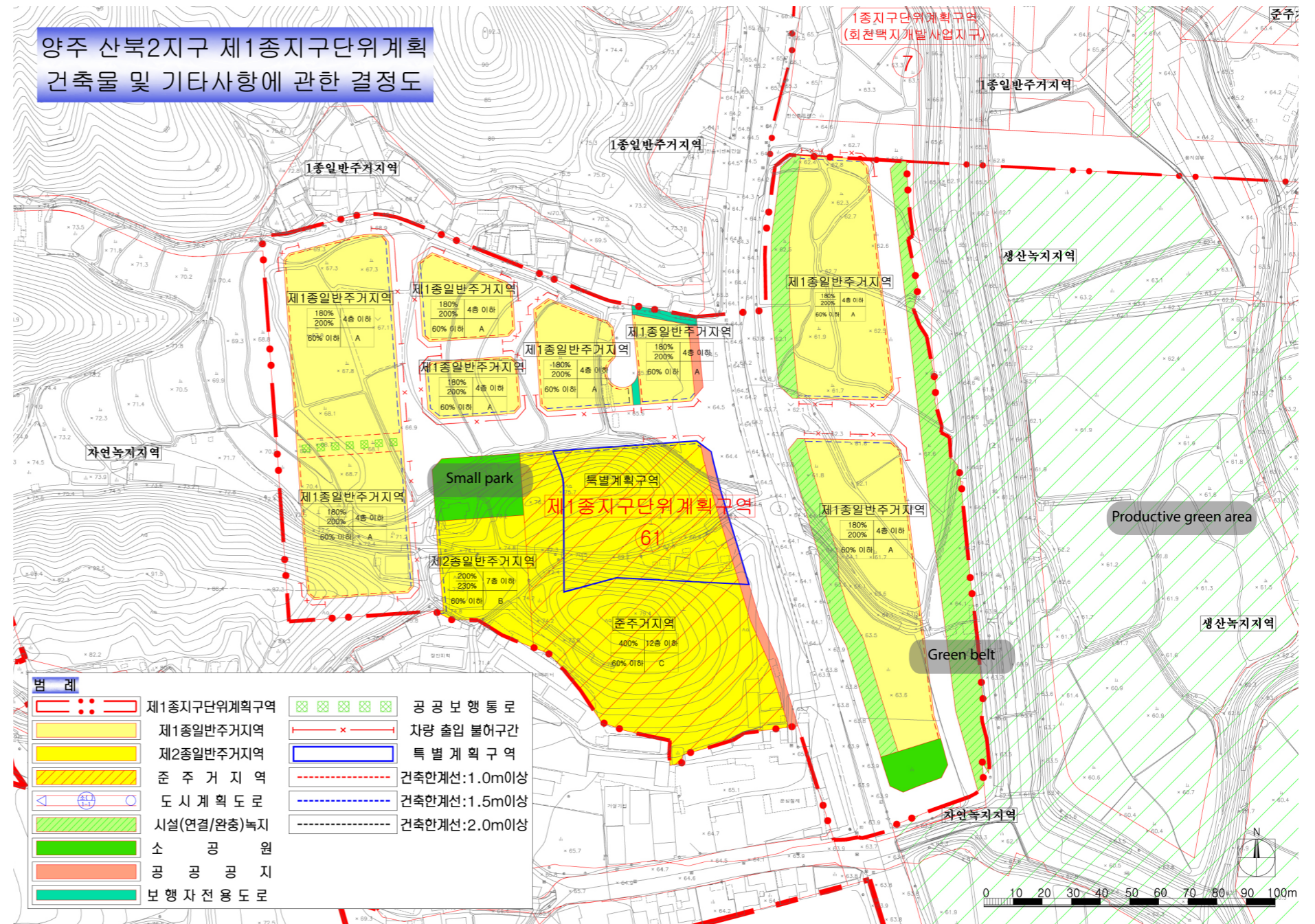
Where do we see Green Growth conform land use categories and zones requiring special considerations in the district-unit plan?

Land use categories

The plan has two land use categories of interest for green growth. This is the park area located to the left, and the green belt area surrounding a housing area. These areas help with bringing quality of life to people and through the neutralisation of carbon.

Zones requiring special consideration

The plan has a zone for special consideration for productive green area (marked with striped green to the far right).



ill. 22 District-Unit plan

4.3 Summary and findings

This chapter investigated how the green growth indicators could be seen in the planning products which go through a planning process in different levels of the government. Although the analysis of the plans was very brief it has given a view of how green growth conform elements are seen in the different levels of the government.

In Norway there are indications to conformity with green growth in the different level of plans. Especially related to environmentally friendly transport and maintaining areas with quality for the wellbeing of the citizens. All plans focused on concentrated land use to prevent unnecessary emissions. Moreover, bike, walking, and rail transport was emphasised several times. The less strategical planning instruments, showed greater effort to focus on effective resource utilisation and effective energy usage in buildings. Also, green areas, biological diversity and minimisation of air pollution. The land use categories in these less strategical planning instruments showed how areas of green land was safeguarded to a great extent. On the other hand, the zones requiring special considerations showed very few and rather vague element related to green growth.

In Korea all plans except for the district-unit plan shows great indications of conformity to green growth in almost all four indicators developed by OECD. One can especially see five strong conform indicators for these plans. These are

environmentally friendly and effective transportation systems (especially railway), renewable energy, initiatives to the reduction of greenhouse gas emissions, establishment of parks and green space, and fostering innovation and strengthen research. Focus on green building, energy creation from disposal of waste, sustainable management of water resources, biological diversity and accessibility has been of great importance in most of the planning products. The land use categories in the two lowest regulatory instruments showed for the most part park areas. However, the urban management plan showed the research complex and waste disposal treatment facility. Furthermore, zones requiring special consideration in the district-plan showed some indications to green growth.

This chapter has helped us answer the fourth partial question about how OECD's green growth strategy is represented in the planning products of Norway and Korea. The findings show many similar characteristics in the Korean and Norwegian planning levels. There is certainly conformity to elements of green growth which is represented in both countries. However, Korea showed more signs of vast changes in reaching green growth especially through focus on research, renewable energy and significant investments in environmentally friendly transportation. This does however not mean Korea is better than Norway concerning green growth. Norway may already have many green growth charac-

teristics which has already taken place in earlier plans which do not show in this analysis. Nevertheless, as almost all Korean planning instruments show more green growth features it gives an indication that Korean levels of government are more conform. The analysis is however very brief. More information is needed about the countries governmental sub-systems and their tradition with green growth in order to see the whole picture. Consequently, we cannot conclude how OECD's Green Growth Strategy is represented in the planning products of the two nations just yet. Accordingly, the next thing we will then look at is how the green growth tradition is in the two countries before we look at the two nations governmental sub-systems.



5. “Green Growth” Norway

Is it existing or has it already existed under a different name?

Norway does not have a long history with the use of the term Green Growth, but has practiced what we consider Green Growth for a long time. In the strategy document “Business development and green growth” the government stated that they as member of the OECD will support and build further on the knowledge which has been done by the OECD and transfer it to Norwegian conditions (Regjeringen, 2011, p. 27). There is no other clear references to OECD green growth strategy except this small note in one of the governmental documents conform to green growth. The term sustainable development is however deeply embedded into the Norwegian society, formally since the introduction of the Brundtland report. Norway has made sustainable development a central focal point in policy making. This became widely used in different acts after the Norwegian Planning and Building Act of 2008 had formulated sustainable development the purpose of the act. The OECD definition of green growth states that green growth is a means of achieving sustainable development. So if we take the term sustainable development and turn the definition of green growth around we can see how the sustainable development also can be considered a way of achieving green growth. If we look at these two sentences we can see how these two terms are interrelated:

- Green growth is a means of achieving sustainable development (statement by OECD).
- Sustainable development is a way of achieving green growth.

More precisely, If Norway is doing well with sustainable development, they ought to be doing well with green growth. Although the country of Norway has gained its great wealth through carbon-based energy, Norway has significant interest in OECD’s Green Growth Strategy and OECD considers Norway a front runner in areas of green growth (OECD, 2010, p. 107). Moreover, Norway is considered one of the global leading countries in ship design, development of new technology and use of environmentally friendly fuel. The world’s first electronic car-ferry is in the making and Norway is looked upon as the world’s electrical car nation (Regjeringen, 2014c). Renewable energy such as hydropower accounts for about 60% of Norway’s total energy use, and there is expertise and technology concerning wind and solar power (United Nations, 2012, p. 162).

From this brief point of view we can see that Norwegian policies play a part in OECD’s Green Growth Strategy rather well. However, as stated above, the country is primarily focused on the term sustainable development. This does not mean Norway does not have any interest in green growth, quite the opposite. In order to get a broader picture of Norway and its view on

green growth we will first investigate the Ministry of Environment history and tasks, and then how governmental policies and strategic documents are conform to the green growth strategy.

Ministry of Environment

The Norwegian Ministry of the Environment was established as its own ministry in 1972. Some say the roots however date back to the 1910 Act on Protection of Nature, which is the first Norwegian holistic act on protection of nature. Moreover, four years later the National Foundation for Nature Preservation was founded (Skou Andersen & Liefferink, 1997, p. 289). When the 1910 act was written, it focused mainly on the scientific or historical considerations for protection. When it was updated in 1954 it was still not what we know as conservation acts on nature as it was narrow-minded. In the conservation act of 1970 however, the nature was seen upon as national value which should be administered with regard to the connection between man and nature, and that the nature’s qualities should be protected for the future (Julsrud, 2012, p. 10). Moreover, other acts to protect the nature, and the establishment of the nature conservation and outdoor recreation department was established under the Ministry of Local Government and Labour around the 1960s. Then, in 1972 the Ministry of Environment was established as the world’s first environmental ministry with a holistic environmental responsibility (Julsrud, 2012, pp. 3, 11).

The mission and task of the ministry is to “take initiative to, develop and complete own policies, but also promote policies to other sectoral authorities. The ministry is responsible to coordinate the governments climate- and environmentally policy goals and keep track of results to make sure that the climate- and environmental policies is going in the right direction. International climate- and environmental cooperation is a requirement to meet the regional and global challenges of the environment.” Today the ministry focuses on the matters related to biodiversity, cultural heritage, outdoor recreation, pollution, climate and the polar areas (Regjeringen, 2014d).

5.1 Policies conform to the Green Growth strategy

Through OECD work on Green Growth the Norwegian government wishes to support and build on the knowledge to transfer to Norwegian context (Regjeringen, 2011, p. 27). Although the green growth term is new in Norwegian context, there are several actions the Norwegian government has or is taking towards creating a sustainable and green growth friendly country. In this section we will first look at some of the government strategies and policies, after having done that we will take a brief look at some important acts with relevance to the green growth concept.



Smøla Wind Farm, Norway - An example of renewable energy

Through OECD work on Green Growth the Norwegian government wishes to support and build on the knowledge to transfer to Norwegian context (Regjeringen, 2011, p. 27). Although the green growth term is new in Norwegian context, there are several actions the Norwegian government has, and is taking, towards creating a sustainable and green growth friendly country. The reason we will look at different policies is to see in what way Norway has policies which are in accordance with the concept of green growth. This will give an impression of how policies are more conform to the sustainable development concept or the green growth concept. In this section we will first look at some of the government strategies and policies, after having done that the next section will take a brief look at some important acts with relevance to the green growth concept.

Norwegian strategy for sustainable development (2008)

The strategy not only focuses on how Norway can contribute to the national sustainable development, but also globally. The strategy has set seven areas of interest where Norway has set goals to improve the sustainability. The areas mentioned in the strategy is: (1) International cooperation for sustainable development and contribute to poverty reduction, (2) Climate, ozone depletion and air pollution, (3) Biodiversity and cultural heritage, (4) Natural resources, (5)

Hazardous chemicals, (6) Sustainable economic and social development and (7) Inclusion of sami perspectives in the environmental and resource management (Regjeringen, 2007, p. 7).

National transport plan 2014 - 2023 - An uplift for environmental transportation

The next 10 years the government intends to spend around 200 Billion Norwegian crowns for environmental transportation in Norway. The follow-up of the Norwegian Climate settlement has been a key factor in connection with the work on the National Transport plan. The intention is to establish a transportation system which can contribute to a change into a low-emission-society (Regjeringen, 2013a). There is three major strategies in the document, which focuses on train, environmental city agreements and more focus on making people bike and walk.

Report No. 13 (2014-2015) New emission commitment for 2030 - A joint solution together with EU

The delegation present at the United Nations Climate Convention held in 2011 agreed that a new climate agreement shall be negotiated in December 2015. In the Climate Convention held in 2013 the nations agreed that every nation would send in their indicative commitments in the first quarter of 2015. The purpose of the Norwegian commitment-document is to inform the parliament of what commitments Norway can make for the period 2021 - 2030. The main indicative

commitments is that: (1) Norway will undertake a contingent responsibility to reduce the emissions with at least 40% in 2030 compared to 1990, and (2) to discuss with EU about a joint fulfilment of the climate commitments with the EU with a climate goal with minimum 40% in 2030 compared to 1990 (Regjeringen, 2015).

Report No. 33 (2012–2013) Climate adaption in Norway

The report presents some important issues concerning how the government works to provide information on how individuals, businesses and authorities can take responsibility for the climate adaption efficiently, and determine the framework for climate adaption between sectors and levels of the government. Since the municipalities are the ones that administer land use in Norway, the government is in the process of making a governmental land use guide based on climate adaption to help the municipalities integrate climate adaption into land use planning (Regjeringen, 2013b). Some of the measures mentioned in the report are, however:

1. Increased uptake of carbon in nature and change of earth's radiation balance.
2. Better knowledge about climate data and surveillance of climate and environment.
3. Robust infrastructure and better systems for notification of climate dangers.
4. Better framework for stormwater and flood protection

5. Research and more knowledge on climate changes and its impact on society, nature and biodiversity.

Also the legislative actions and the development of some acts the past few years, have contributed to more policies and consideration for the climate changes. These include the building and planning act, the act on civilian defence and nature diversity act.

Business development and green growth - Governments strategy for environmental technology

The strategy explains why investment on environmental technology is important: (1) Norwegian technology can contribute to solving the worlds environmental challenges, (2) Potential for value creation and employment, (3) The change needs to be attractive for the private and should start in the public sector for a more sustainable society. These three reasons for investment are important not only for the environment, but also for the advancement and competitiveness of Norwegian enterprises (Regjeringen, 2011, pp. 10-17). As development and use of environmental technology should bring value creation and also create environmental improvements, the government created six initiatives to work towards:

1. Commercialising and technology testing
2. Research and knowledge development
3. Network and cooperation

4. Environmental regulations
5. Procurements in public and private enterprises
6. Further development of the knowledge base for the policy

In the same document the government says that it will help to develop a framework for calculations and development of new indicators for green growth which can reveal deficiencies and measure progress. How this will develop will be interesting to follow up on.

5.2 Green Growth conform acts

Planning and Building Act of 2008

As explained in the introduction of this chapter, sustainable development has become more of a focal point in urban planning since the current planning and building act was introduced. The planning and building act is essential for green growth as it is the framework for which land is managed. As mentioned earlier, sustainable development is a way of reaching green growth, and this act has put special consideration to the sustainable development concept which is stated in the first article ("Planning and Building Act,") The act has a number of regulatory tools conform to green growth, such as the following:

100 meter belt building restriction by the sea and along waterways (art. 1-8)
Impact assessment (art. 4-2)

Risk and vulnerability analysis (art. 4-3)
Zones requiring special consideration (art. 11-8, 12-6)
Land use categories (art. 11-7, 12-5)
Land use provisions (art. 11-9, 12-7)

It rather important that we do not forget the importance of the act for conform green growth planning. In regard to the above-listed regulatory tools, the land use categories, land use provisions and zones requiring special consideration are tools which change the framework and regulatory instruments. With regard to green growth, first, the land use categories have several categories for green areas, agriculture and preservation of water reservoirs. Second, land use provisions lets the planner formulate provisions regarding environmental quality, nature, landscapes and green infrastructure. Lastly, the zones requiring special consideration have considerations regarding areas such as biodiversity, landscape, green infrastructure, agriculture and natural or cultural environment ("Planning and Building Act," art. 11-7 - 11-9). These three tools of the governmental sub-system contributes to green growth significantly when utilised with framework and regulatory instruments. Moreover, the planning act is meant to correlate together with the nature and diversity act. We will take a brief look at this act below.

Nature Diversity Act of 2009

The nature diversity act is relevant to the green growth concept in the sense that it contributes to the sustainable use of nature's "biological, landscape-related and geological diversity and ecological processes", and promotes moreover the well-being and health of humans through the its use ("Nature Diversity Act," art. 1). In the Rio Declaration, as we briefly introduced in chapter three, a number of principles regarding the responsible development was written down. Some of these are directly implemented into the nature diversity act. This includes regulatory provisions such as decisions about nature diversity should be based on scientific knowledge (art. 8), the precautionary principle (art. 9), the polluter pays principle (art. 11) and environmentally friendly technology should be used to minimise damages (art. 12). These provisions help with the sustainable use of nature and its diversity, and is fully conform with the green growth concept.

INFOBOX 2

BREEAM (Building Research Establishment Environmental Assessment Methodology)

In Norway, Norwegian Green Building Council is the Norwegian owner of BREEAM-Nor. They set the sustainable standard for quality which is higher than that of the government.

Norwegian Green Building Council claims that BREEAM will in the short term contribute to increased sustainability and quality in the Norwegian commercial buildings, through increased awareness of how owners, tenants and the community can achieve:

- Increased comfort for building users, by ensuring healthy, predictable and efficient solutions
- Better economy, performance and value increase
- Better environment and lower energy consumption

6. Green Growth South Korea

Is it existing or has it already existed under a different name?

In South Korea the term 'Green Growth' has been used widely since the launch of the "Low-Carbon Green Growth" strategy in 2008 by the Lee Myung Bak administration. However, as mentioned earlier, green growth is also found in talks about such a policy since 2005 at the Fifth Ministerial Conference on Environment and Development. The president said, "Green growth seeks sustainable growth by reducing GHG emissions and environmental pollution. It is a new development paradigm which creates new growth engines and new jobs from green technologies and clean energies" (Young, 2009, p. 3). The president also set ambitious goals as becoming the 7th ranking green economy by 2020, and 5th ranking by 2050. After the introduction of the strategy the president established a Presidential Committee on Green Growth (PCGG) to work as a coordination forum for representatives from important ministries, private sector and academics ("Framework Act on Low Carbon Green Growth," Article 14; Mathews, 2012, p. 762). The presidential committee on green growth moreover, "co-ordinate the agenda-setting, policy formation, monitoring and evaluation of green growth programmes at all levels of government" (OECD, 2012, p. 135). It is important to note that the presidential committee for green growth is the successor of the previous presidential committee for sustainable development of 2000 which came into being when the new vision of

green growth was introduced (Chung & Hwang, 2006, p. 22). I shall however not leave out the fact that green growth in the new administration under Park Geun Hye seems to have less significance than it had before. We will return to this.

This brief introduction to Green Growth in South Korea gives us a picture of the importance of Green growth for the Korean society. In the next sections we will investigate the Korean definition of Green Growth and the Korean Ministry of Environment's history and tasks before we look at the governmental policies and strategy documents related to the green growth strategy.

Korean Green Growth definition

In Korea they have an own definition of green growth which can be explained with three objectives. First, "it aims at establishing a virtuous cycle of the environment and the economy". Second, it works toward "improving the quality of life", and lastly "enhancing international cooperation" (Presidential Commission on Green Growth, 2010, p. 5). In order to establish a virtuous cycle the term green growth encourages a mutual supportive relationship between the environment and economic growth by including the framework of sustainable development. What this practically means is investment in green technology, green new deals and an overall substantial investment into the green sector. The quality of life will improve by the growth of the green

spaces, green transportation systems and the promotion of green consumption for a greener society. Through enhancing international cooperation Korea and countries in between can offer guidelines to each other and share best practice of minimum environmental deterioration. In short, the definition has the idea that economic growth can happen without environmental deterioration if sustainable economic growth is one of the main pursuits of the nation (Chu et al., 2011, pp. 7-8). Moreover, at GGGI one explained that green growth gives a practical framework which can be more easily managed and measured in contrast to the broad definition of sustainable development.

Ministry of Environment

The Ministry of Environment did not become its own ministry until 1990. It has its roots however in different ministries. The roots go back to 1967 when the Ministry of Health and Society was established. In that ministry there was a pollution section, which later changed to the pollution division in 1973, whom were responsible for the environmental administration. Through presidential change many reforms in the government happened, and in 1980 the Environmental Administration became a subordinate of the Ministry of Health and Society with greater importance than before. Finally in 1990, The Ministry of Environment was established. The Environment Administration was pulled out of the former ministry,

Ministry of Health and Society, and advanced to the establishment of the new ministry under the Prime Ministers Office where it could coordinate and efficiently integrate environmental issues. Moreover, after a reform of the government, the ministry received more authority which made it easier to create and implement their own policies (Ministry of Environment, n.d.).

The mission of the Korean Ministry of Environment is "to protect the national territory from threats of environmental pollution and improve the quality of life for the public so that the people can enjoy ambient natural environment, clean water and clear skies" (Ministry of Environment, n.d.). Moreover the mission is to contribute with global efforts in protecting the earth.

The ministry's task is the "enactment and amendment of environmental laws and regulations; introduction of environmental institutions; building up framework structure for environmental administration; drafting and implementation of mid-long term comprehensive measures for environmental conservation; setting up standards for regulations; providing administrative and financial support for environmental management to local governments; inter-Korean environmental cooperation; and environmental cooperation with other countries" (Ministry of Environment, n.d.).



Songdo International Business District, South Korea - An example city of green and low-carbon growth

Songdo Central Park
CC BY-NC-SA 2.0 by Baron Reznik (Flickr)

6.1 Green Growth act

The Framework Act on Low Carbon Green Growth is the legal basis for the governments National Strategy for Green Growth, which is stated in Article 9 (1). The act states the roles of the different levels of government, public sector and the citizens, and is the main framework for green growth action at the lower level governments. Moreover, it gives the central government power to establish policy tools to contribute to the implementation of national green growth projects and policies at the lower levels (OECD, 2012, p. 139).

The purpose of the act is “to promote the development of the national economy by laying down the foundation necessary for low carbon, green growth and by utilizing green technology and green industries as new engines for growth, so as to pursue the harmonized development of the economy and environment and to contribute to the improvement of the quality of life of every citizen and the take-off to a mature, top-class, advanced country that shall fulfill its responsibility in international society through the realization of a low-carbon society” (“Framework Act on Low Carbon Green Growth,” Article 1).

The act specifically contributes to urban planning and infrastructure management through article 3 (6) where it gives the government the right to “rearrange infrastructure, including national land and cities, buildings and transportation, road, ports and harbours, and waterworks and

sewerage systems, to make them suitable for low carbon, green growth while preserving the value of national resources and environment”. The local governments also play a central role in implementing green growth from the top level down the lower level, and through their own green growth policy establishment. They cooperate with the national strategy for green growth through matters such as:

- In article 5, the central government encourages local governments to take local characteristics and conditions, impacts that plans and projects have on green growth, intensify green growth education and advocacy, encourage green growth activities of business entities, residents, and non-governmental organizations by providing information and financial support.
- In article 11, the provincial and metropolitan city governments are instructed to establish and implement a local action plan for green growth which is in harmony with the national. The lower governments under these are however not required to establish such plans.

The Framework act has a several requirements specifically directed towards the local governments. However, the National Strategy for Green Growth also indirectly and directly has consequences for the local urban planning although the respective cities do not have a local action plan.

The reason for this is that the central government provide financial support for local green growth projects. We will briefly look at one local action plan in the next section.

6.2 Green Growth Policies

National Low Carbon Green Growth Strategy

The National Strategy for Low Carbon Green Growth is a strategy which is meant to last until 2050 with modifications and short term five year plans along the way. It was formed as the Korean government has saw the necessity of making a comprehensive long term master plan to confront the challenges intensified by climate change and resource depletion. It has three strategic pillars with ten specific policy directions set for the long term vision of the nation. The three pillars are:

1. Mitigating climate change and promoting energy independence
2. Creating new engines for economic growth
3. Improving the quality of life and enhancing Korea’s international standing

The ten specific policy directions are conform to article 9 of the Framework Act on Low Carbon Green Growth which defines what the National Strategy for Low Carbon Green Growth should include. The ten policy directions are:

1. Effective mitigation of greenhouse gas emissions
2. Reduction of the use of fossil fuels and the enhancement of energy independence
3. Strengthening the capacity to adapt to climate change
4. Development of green technologies

INFOBOX 3

Establishment and Implementation of Basic Plans for Sustainable Development (Also plans for Energy and Climate change)

Article 50 of the Green growth act also states that the central government, central administrative agencies and the provinces shall make a basic plan for sustainable development. This plan is to ensure the international agreements related to sustainable development, such as Agenda 21 and the plan of implementation adopted at the World Summit on Sustainable Development is taken into consideration when planning the national and provincial land. It is stated that this shall include:

1. Matters concerning the current status of sustainable development, changes in circumstances, and prospects thereof.
2. Matters concerning the vision and goals of sustainable development, the strategy and principles for promotion, the direction of the basic policy, and major indexes for sustainable development.
3. Matters concerning the performance of international agreements related to sustainable development.

5. The “greening” of existing industries and promotion of green industries
6. Advancement of industrial structure
7. Engineering a structural basis for the green economy
8. Greening the land, water and building the green transportation infrastructure
9. Bringing green revolution into our daily lives
10. Becoming a role-model for the international community as a green growth leader

Five Year Plan for Low Carbon Green Growth

The Five Year Plan is a framework to achieve short term goals of the long term National Strategy. It has a number of quantifiable objectives, and specific policies and projects which leads green growth during the five years.

Green Growth conform acts

- Natural environment conservation act
- National land planning and utilization act
- Framework act on the national land
- Wildlife Protection and Management Act
- Conservation and Management of Marine Ecosystems Act
- Natural Parks Act

Global Green Growth Institute (GGGI)

GGGI fosters green growth in developing countries and help these countries to reduce greenhouse gas emissions through practical guidance and help at the local level. It was first established in 2010 as a Korean non-profit organisation, but

became an international organisation in 2012. Since the move to an international organisation they have more than 35 projects in 22 countries in almost all continents (GGGI, 2015, p. 17). Norway is moreover one of the founding members of the organisation, and gives substantial financial support.

Four Rivers Restoration Project

Launched for effectively management of water resources and to strengthen the nation to prevent floods and droughts caused by the changes regarding climate.

Seoul Metropolitan City Local Action Plan For Green Growth

Article 11 in the Green Growth Act requires metropolitan cities and provinces to establish local action plans for their land. As an example we will look at the main actions Seoul metropolitan government strives towards. Seoul local action plan has set up the following actions:

1. Introduction of a smart grid network
2. Improve energy efficiency in public buildings
3. Select and support ten green technologies which foster innovation
4. Reinforce the climate change monitoring system

6.3 Push towards an OECD Green Growth Strategy

The introduction of OECD’s Green Growth

strategy did not come suddenly. The Green Growth strategy which was introduced in 2008 by the Korean president was just the start. During the OECD Council of Ministers held in Korea in 2009, Korea wanted bring the Green Growth strategy into OECD as a global policy. Many developing countries have focused on poverty reduction and economic development, while taking little action towards the reduction of greenhouse gases as this has been connected with decline in economic activity. Korea on the other hand claim to have already established an economic development model which is compatible with the development policies of developing countries and climate change policies of developed countries. Moreover, Korea with their green growth model also propose suggestions to international and development cooperation, implementation of new cooperation projects to contribute to the climate change issues on the international level, and for international green growth cooperation. For this reason Korea as the chairman country for the 2009 OECD Council of Ministers discussed their green growth strategy with the representatives present. Consequently, in December the same year OECD began preparing for a Green Growth Strategy report to support the member nations. The report was completed and adopted in May 2011. During the establishment of the report Korea had workshops for OECD to show their experience of their green growth strategies and also provided international workshops to collect the view of

developing nations. The motive of the Korean aggressive move towards OECDs adaption was to make green growth a global policy. As OECD plays a central role in the establishment of regulations for global economic order, implementation of the green growth strategy has given more attention to the relationship between economy and environment, and will be important to implement such strategies in developing countries (Chu et al., 2011, pp. 105-106). However, through interviews with staff at Korea Environment Institute and GGGI I was left with the impression that green growth, which started with the former president, had lost some of its power since the change of government.

INFOBOX 4

Urban planning guidelines for Low Carbon Green Growth

Objective: Provide standards and guidelines for establishing Metropolitan Plan, Bourough Plan and Urban Management Plan, so that the plans can deal with possible affect from climate changes and be compatible to the central government’s Low Carbon Green Growth objective.

The guideline from the Central government can be divided into three:

- Institutional/regulatory foundation to deal with climate change influences on urban planning
- Reducing greenhouse gas by figuring out the current emission volumes
- Evaluating energy efficiency of plans on the land use unit basis

6.4 Summary and findings

Chapter five and six investigated how green growth is present in the Norwegian and the Korean nations respectively. In the brief chapter about Norway, we saw that green growth is not a concept used in Norwegian policies, it is nonetheless something the Norwegian government support. Norway has been a leading nation with regard to sustainable development. Already in 1910 the act on protection of nature was enacted, and in 1972 the Ministry of Environment was established with a holistic environmental responsibility. The policies and legal frameworks also give indications to green growth conformity.

In the chapter about Korea, we saw briefly how green growth is explicitly manifested multiple places in the national government. In 2008 the focus changed from sustainable development to green growth. Since the introduction of green growth, vast changes have happened which can be seen in all the presented initiatives, policies and legal frameworks. Moreover, it was Korea whom aggressively pushed the green growth concept upon OECD, which led to the OECD Green Growth Declaration in 2009.

Then, which role has green growth played in the national policies of sustainable development? Based on the findings in the two chapters we can infer that OECD's green growth policy unquestionably is more apparent in Korean policies, and there certainly are indications to significant green growth practice in the governmental

sub-systems. Green growth appears to have taken precedence above sustainable development in Korea. The reason for the removal of the presidential committee for sustainable development seems to have been that they needed a concept which could further enhance the economic development in an environmental and attractive way. It is attractive, first, in the sense that there are rather few if any nations with a comprehensive national goal which promote economic advancement through environmentally friendly solutions. Secondly, the last president which introduced the green growth concept believed that innovation is the key to economic growth, and therefore a reform would help the economy to continue to grow. In contrast, Norway has had strong focus on sustainable development and has not changed as a result of OECD's introduction of the green growth strategy. Yet, there is green growth conformity in the Norwegian system. The establishment of the sustainable development concept in Norway can be said to have begun with the report 'Environment and Development' from 1989 which adopted the Brundtland report. It is rather evident that the focus of the Norwegian government has been sustainable development while the Korean government focuses on green growth. Although there is a difference between the two concepts the correlation is vast, which we can see through OECD's green growth statement; green growth is a means of reaching sustainable development.

Having analysed which role green growth play in the national policies of sustainable development, we can move on to the next question. What changes or reforms have been made in the public administration in order to adapt to a policy for green growth and facilitate its implementation? When we looked at green growth conformity in the Norwegian nation, there were no signs of changes which had occurred as a result of the introduction of green growth. In one of the government documents however, the government has plans for the development of green growth indicators. How or when this will be done is however rather unclear. Although the nature diversity and planning and building act were enacted in summer 2009 (none of the revisions since then has shown any signs either), they were formulated before the declaration took place and consequently we cannot see any indications from this point of view. In contrast, the Korean system show numerous clear alterations in order to adapt to the green growth policy. Changes such as the establishment of a presidential committee for green growth, framework act on low carbon green growth, development of the national green growth strategy with five year plans, implementation of local action plans, the central governments power to establish green growth policy tools, urban planning guidelines and the founding of GGGI's predecessor. From this point of view, we see a that innovative elements have been introduced, both arenas and committees. A reform has thus taken place which has changed

the system radically. It is however important to note that South Korea is considered the first nation to have formally established the green growth concept. Additionally, it was the Korean government which pushed the green growth policy upon OECD in order to implement it as an international policy. Consequently, it is rather important to realise that it was not OECD's policy which made alterations to the nation, it was Korea's own introduction of the green growth concept in 2008.

However, we have not analysed if there has been any alterations in the public administration related to the planning system, or other innovative elements such as the Korean land use categories and zones requiring special consideration. This we will need to investigate in the next two chapters where we present the two planning systems.



7.1 Demography and Geography

In this section we will provide some basic information about the demography, geography and urbanisation history of Norway, and likewise in Korea in the next chapter. By looking at demography and geography in the two countries we will be able to understand more fully how extensive the tasks the public administrations is when we compare it with the planning system.

Urbanisation history

Norway has experienced a geographical centralisation the past 60 years. This mainly came as a cause of “technological development and international competition in product”, but also where they could find work (OECD, 2007, p. 31). Three patterns show how the movement of people has been occurred:

1. From rural to urban areas
2. From north to south
3. From inland to coast

The urban growth was significantly in the 50s and 60s. After the mid-1980s, nearly fifty percent of the municipalities experienced decline in the population as the migration, especially to urban areas, occurred. This changed how municipalities had to handle planning as the ones remaining in the municipalities were old people.

Population: 5 166 000 (2014)

Population density: 17 inhabitants per sq. km (2014)

Land size: 324 000 sq. km, 27% productive forest and 3% agricultural areas (2014)

Topography: Norway is a mountainous country, where forest, fjords, peninsulas, coastal islands and glaciers are abundant. Consequently, the rugged landscape character makes communication difficult. Moreover, 30% of the Norwegian is protected areas under the Nature diversity act (SSB, 2015).



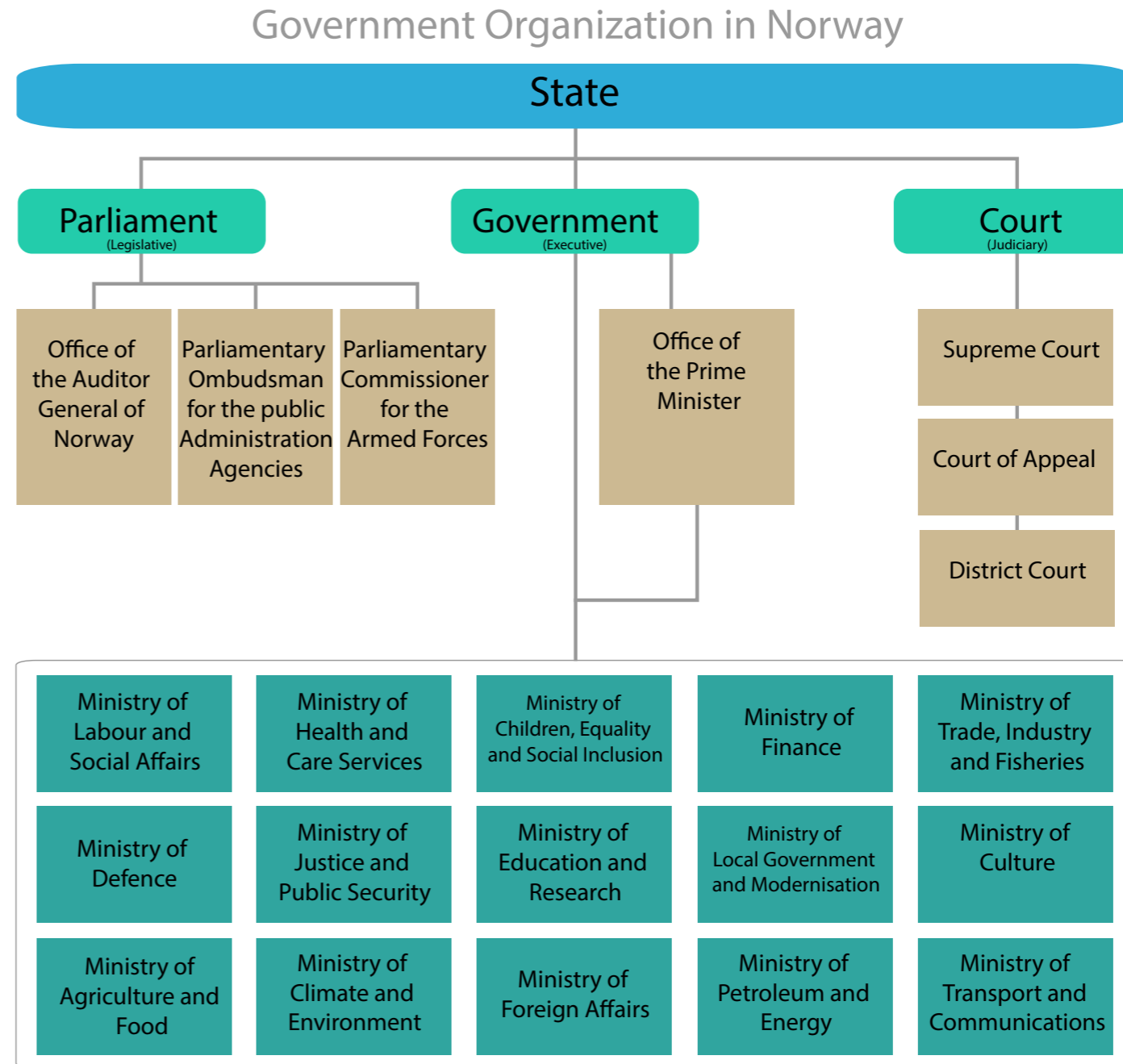
ill. 23 Map of Norway

7.2 Government Organization

The kingdom of Norway is a constitutional monarchy, yet the king has no political power. The parliament has the main role in controlling the nation and formulating laws. The executive administration consist of the following three levels:

1. Central government: which is led by the prime minister and the ministries below him.
2. County Council: 19 regional authorities
3. Municipality: consisting of 428 local administrative units

The nation is not a member of the European Union, but takes part in the economic cooperation through the regulated European Economic Area (EEA). The power of the nation is left to the parliament, government and the court.



ill. 24 Government organisation in Norway

7.2.1 Local vs. Central Government

Autonomy values of the municipalities

Freedom

Freedom was an important driving force behind the establishment of the local institutions and the legislation of the Acts of Presidency in 1837. This was seen as a liberation from the government powers and the powers of the bureaucracy. Later, the value was more related to the freedom to take initiative to broaden local services and to realise the interests for the local community. A proper autonomous assumes that the local elected representatives should have freedom to make their own priorities and make local adaptations of the national policies. However, the freedom has never been unrestricted, not ideologically or in reality. The municipalities have always been subject to state management and control, and this is expressed by the municipalities negative defined competencies (Regjeringen, 2012, p. 12). What this means is that the municipalities can do whatever they wish, as long as it is not illegal or tasks assigned to other administrative or private actors.

As time has passed, the emergence of the welfare state has led to limited freedom in the autonomous municipalities. The postwar period is characterised by new tasks and policies imposed on the municipalities by the state. As a result, it seems like the municipal freedom to take initiative to new tasks has been reduced. The values of freedom represent the two-sided role the munic-

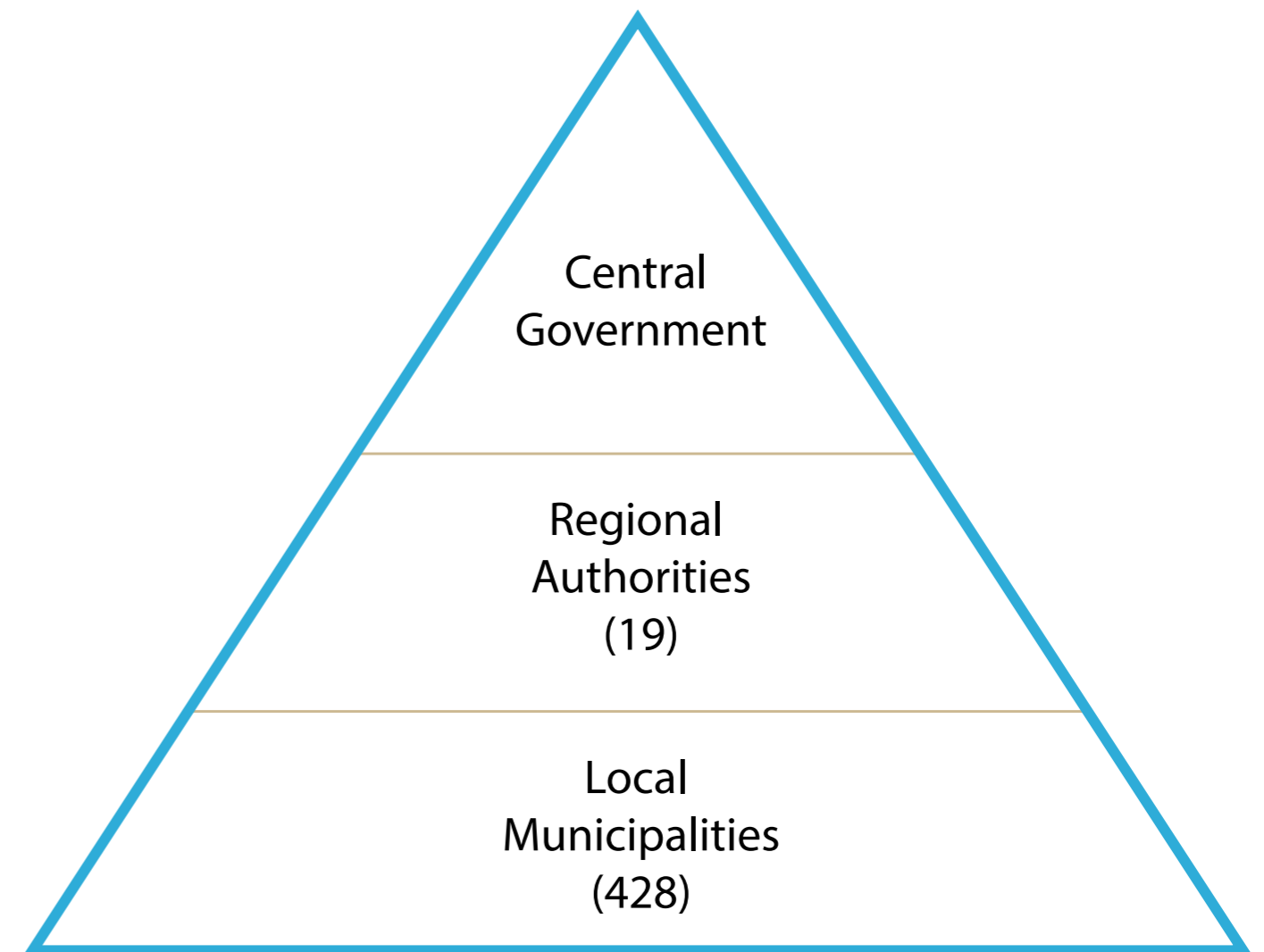
ipalities have: the municipalities and county councils are political institutions with legitimacy in representative elected bodies, while at the same time an implementing agency for the national policy (ibid, 2012, p. 12).

Democracy and participation

In an autonomous municipality there is closeness between the citizens and the elected. It is a basic principle that the citizens can affect and participate in the solutions of tasks in the local community. This strengthens the individuals' influence on their daily life. The closeness between the citizens and the local elected gives the politicians greater insight into the citizens' wishes when the politics should be planned and put into practice (ibid, 2012, p. 12). Political participation, both in and through election also gives the system legitimacy. We call this the subsidiarity principle.

Efficiency

Efficiency can be divided into two separate terms: priority efficiency and cost efficiency. The first, is connected to the responsiveness. The municipality as a political organisation knows best how to answer demands from the citizens. Because of this closeness and knowledge of the local situation, the municipality can adapt the services and community development to needs, wishes and local situations in the local community. The second term for efficiency, cost efficiency, is about how we can use money efficiently. There is a legitimate requirement to avoid public wasted money and



ill. 25 Levels of governments

keeping the growth in expenses to the minimum (ibid, 2012, p. 13). Moreover, municipalities who are efficient in their use on money for services get more money to spend on other projects.

Tensions and challenges between the local and the central government

The local municipalities are supposed to have a mandate from the local citizens which have autonomous function to make decisions, but at the same time also working as an implementer for the central governments welfare policies. It is thereby always some tension regarding the national policies which are to be implemented locally. It has been like this since the establishment of the Acts of Presidency in 1837. We will take a look at the tensions and challenges with the central governments policies implemented in the autonomous municipality (ibid, 2012, p. 15).

With the Norwegian welfare state where the welfare is done primarily through the municipalities, it is no longer possible to say that the municipalities have a lot of autonomy. The central government and the municipalities have a very close connection, where one would say the two are integrated. However, this is only when they want to achieve the same tasks regarding welfare services.

As we mentioned earlier, the municipal freedom to be unique with its autonomous functions seem to have been reduced. The central govern-

ment is overlooking the municipalities to see if they are acting in accordance to the law. However, if a problem in a municipality connected to the welfare system arises, the central government is often blamed. Nevertheless, the central government cannot take full responsibility as the municipality has been provided autonomy to act as a welfare service provider to its citizens, and the actual giver of the service is moreover the municipality. There is also differences between the welfare services between the municipalities, and this is mainly because of the citizens income. The more income the citizens get, the more tax money goes to the municipalities which can be used on welfare services. However, the difference between the welfare services in the municipalities are not that big in reality, the reason for this is that the central government requires municipalities to do the same tasks (ibid, 2012, p. 15-16). We call this the generalist municipality system (generalistkommunesystemet).

Another tension between the two players is the different sector interests. While the central government has plans to build power poles across many municipalities areas, the municipalities often do not want these huge poles in their municipality. The central governments' Ministry of Petroleum and Energy has however priority as building these is a national requirement. Another example is when the municipality is proposing development projects, the central government may intervene and say that they will not allow such development because of dangers, future

development, the law or other reasons.

The history of the Norwegian municipalities and government

The Acts of Presidency are considered constitutional laws for the municipalities. It defined the municipalities geographical limits, instituted the governing body, established rules for the processing of cases in the governing bodies, put limits to the municipal expertise and regulated the coordination and cooperation between the municipality and the central government. The development in the 19th century is characterised as a start of decentralisation from the central government to the municipalities, and the municipality is given more tasks. Moreover, volunteer organisations, associations and other citizens worked together to solve problems which were important for the community (ibid, 2012, p. 17). The central government set requirements for the municipal services such as taking care of the poor and the school, but otherwise the municipal was more or less autonomous.

In the end of the 19th century to the 1970s the municipalities were some kind of pioneers in the development of the welfare society. During this time the municipalities had great autonomous power, and implemented the welfare services that came based on the local needs. At the same time the universal right to vote and the establishment of political parties took place. The municipalities

had certain welfare services they were required to provide, but in the 1920s municipalities also established non-required institutions such as high school, middle school, municipal hospitals, nursing home care and more. Such establishments became the beginning of the municipal primary care. As the municipalities invested a lot of money into such welfare services many had great debt they had to repay. In the 1920s it was evident that the central government had to take a significant responsibility for the municipal economy. The period of great autonomous power became more reduced as the central government saw the need to interfere into municipal issues, and more integration between the two. The municipal began to expand again after in the first decades after the second world war, and the role as the central governments implementer got stronger but still quite autonomous. Although the municipality had to implement policies from the central government, these had to be adapted to the local context which the municipality decided. In the 70s however, the people central government had made a more complex system for regulating and controlling the municipalities, and therefore the municipalities asked for more autonomy. In 1992 the Municipality Act was established which stressed the municipal freedom to choose organisational forms and is the current act which applies to the municipalities (ibid, 2012, p. 17-18).

The four roles of the municipality

There is a huge difference in municipalities number of inhabitants and land area size. But they are however required to provide the same services and do the same tasks as big municipalities regardless of number of citizens, settlement structure, topography etc. The smallest municipality has about 200 citizens while the capital municipality has about 600,000 citizens. But half of all the municipalities in Norway has less than 5,000 citizens. The smallest municipality in area size is about six square kilometres, while the biggest has around 9,000 square kilometres (Regjeringen, 2012, p. 25). Moreover the demography is different from one municipality to another. Consequently, it is not easy for every single municipality to carry out the same tasks. In that way, it is quite necessary to adapt policies to the local context. The roles are as follows:

I. Service provider: Giving welfare services to its citizens.

2. Democratic arena: Local political management with local citizens giving input to the municipality.
3. Executive authority: The citizens need legal protection to prevent the municipality from doing illegal actions, as they have a lot of power given from the central government. In this case the citizens have the right to file complains on certain municipal decisions and plans.
4. Development of society: The municipality in Norway is the main authority which carry out land planning and sets the limits for development of land. The Nature Diversity Act, Planning and Building Act, Cadastre Act and the Spatial Data Act and some of the many acts which regulate how development of the municipal land should be done.



ill. 26 Administrative borders

7.3 The governmental sub-system and its regulative tools

Organization and responsibilities

The central government is the top level authority in terms of creating and spreading the national goals and guidelines for planning to the lower levels, and also with approving the regional planning strategies. The Ministry of Local Government and Modernisation is the top level of central government which decide outcomes of controversial plans and cases related to the building and planning act, which they ensure is practiced correctly. The regional authorities, county councils, are required to prepare and adopt regional plans and planning strategies. The lowest level, municipality councils, are required to establish master plans and zoning plans for land use at the municipal level (Regjeringen, 2014b).

1. Ministry of Local Government and Modernisation
2. County
3. Municipality

The County governors role as a mediator between local and central government

The county governor acts as the representative for the central government in the each county. The main role of the county governor (fylkesmannen) is to ensure that central governmental policies are implemented by counties and municipalities. He oversees the administrative and financial management, and is the warranter for constitutional rights. In relation to planning he

can also act as a court of appeal when building permit is rejected, as he has been delegated this authority by the Ministry of Local Government and Modernisation (OECD, 2007, p. 202; Regjeringen, 2014b). When municipalities formulate a land use plan which is of “national or regional importance, or which is of other reasons important for the concerned body’s field of responsibility”, the involved governmental or regional body have the authority to object to the planning proposal (“Planning and Building Act,” art. 5-4). The county governor, as the closest central governmental representative, may make such an objection.

History of Planning laws

The Building Act of 1845 came as several cities came to being after 1814. New cities were formed, and the already established cities were growing increasingly. Consequently, the control of the cities became an important issue in order to prevent unfortunate physical design which could lead to city fires (Bratberg, 1995, p. 17). It is important to understand that the act did not have provisions for some of the major cities as these had their own provisions which regulated their respective cities. However, the important thing about the establishment of the law was that it was meant for all cities in the country.

The Building Act of 1896 did not include the major cities Christiania (today's Oslo), Trondheim and Bergen. The 1896 Act included provisions about many new materials to be used which was

not included in the previous act (Bratberg, 1995, p. 24).

1845: Building Act
1860: Health Act (regarding houses that were hazardous to the health)
1869: Regulation Act of Burnt Districts
1895: Stair Act (regarding fire safety)
1896: Building Act (Rep. Act of 1845)
1904: Compulsory Brick Act (regarding the city fires)
1924: Building Act (Rep. Act of 1896)
1965: Building Act (Rep. Act of 1924)
1985: Planning and Building Act (Rep. Act of 1965)
2008: Planning and Building Act (Rep. Act of 1985)

ill. 27 History of planning acts

According to Bratberg (1995: 27) the Building Act of 1924 came as arguments about the previous act had made building more expensive and the shortage of houses increased. This act changed the system which had been practiced since 1845. Every city and densely populated areas were included in the act, and the previous special provisions for major cities was abolished. The act did however, not include rural areas with less than 2000 inhabitants.

Although the Building Act of 1965 was a continuation of the previous act, it included several profound modifications. One of the main changes was that the act now regulated all land in every municipality of the whole nation and required the

municipalities to develop a land use plan for the municipality. During this time Norway was in an economic development phase; development pressure increased, new technical solutions came to being and there was a need for flexible ways of conducting planning. The Act was a authorisation and framework act which allowed for local adaptation. In 1972 the Ministry of Environment was established and was responsible for the planning part of the Act. The Ministry of Ministry of Local

INFOBOX 5

Some of the laws related to the planning and building act:

- Energy Act
- Nature Diversity Act
- Outdoor Recreation Act
- Pollution Control Act
- Act relating to Salmonids and Fresh-Water Fish etc.
- Water Resources Act
- The Wildlife Act
- Act relating to Land
- Forest Act
- The Concession Act
- Cultural Heritage Act
- Road Act
- The Road Traffic Act
- Railways Act
- Minerals Act

Government and Modernisation was responsible for the building part of the Act (Bratberg, 1995, p. 28).

The 1985 Act is a revision of the 1965 Act. Bratberg (1995: 29) explains that it acts as the main framework tool in municipal and county planning, and makes the procedure for building applications easier. It also puts greater emphasis on the elected governance and the decentralisation of the authorities exercise.

The current Planning and Building Act focuses on the sustainable development, effective transportation system, universal design, increased requirements for security, health and local environment. The act is also a multisectoral act which coordinated the use of several acts that are related to land use planning.

The instruments of the governmental sub-system

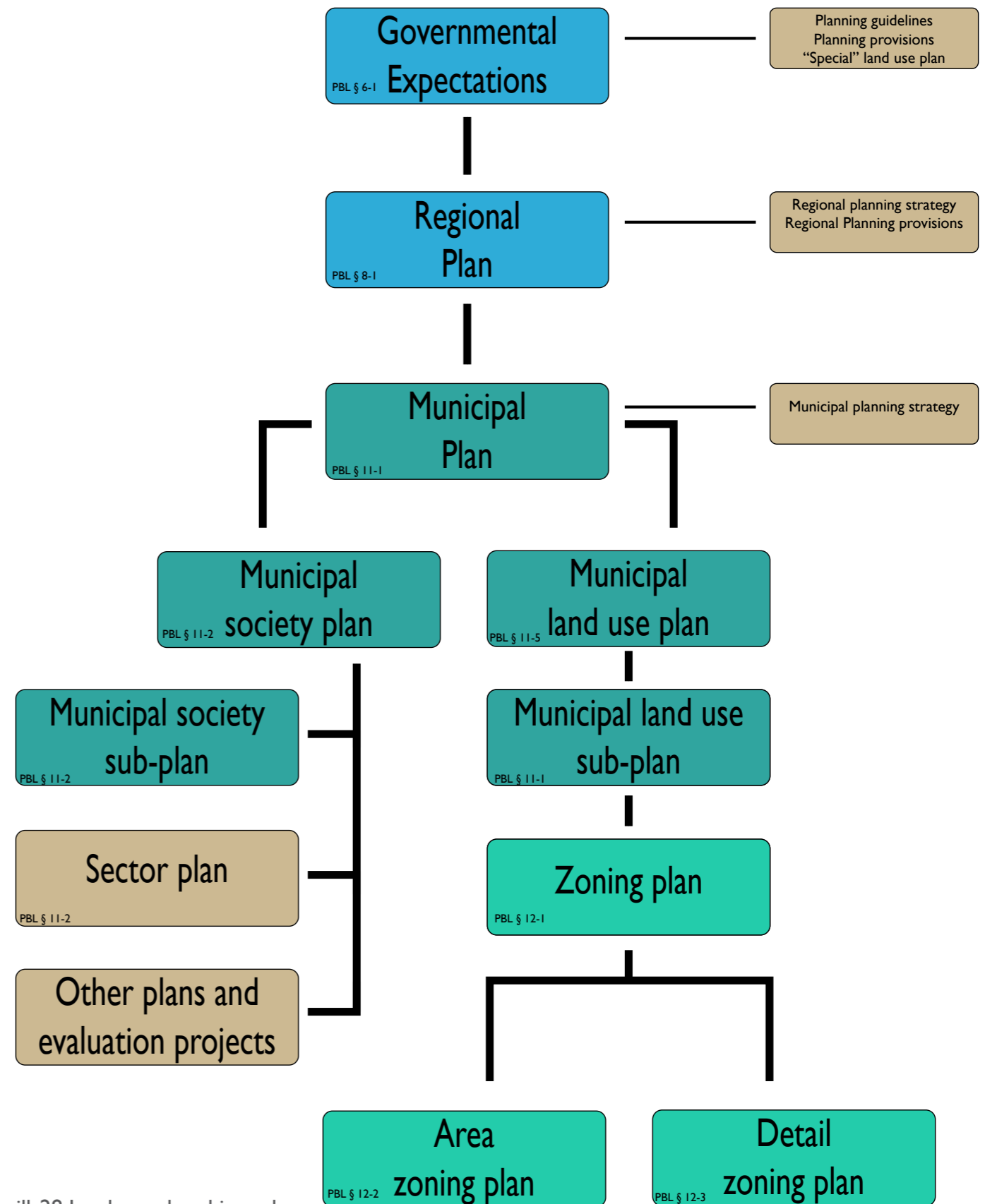
National planning guidelines and provisions
National policies regarding planning consist of four types of tools specified in chapter 6 of the planning and building act:

1. National expectations
2. Planning guidelines
3. Planning provisions
4. Governmental land use plans

The first, consists of the national expectations to the lower level land use planning, and acts as a national policy instrument through its directions. Article 6-1 gives the legal framework for the national expectations. The act states that every fourth year the central government are required to prepare a document with national expectations for the regional and municipal planning. The document lay the foundation for the strategies prepared in the county and at the municipality level.

Secondly, there are central governmental planning guidelines which are used when there is a need to specify planning guidelines for the nation as a whole or a specific area. These guidelines take the form of national policy and regulatory instruments as they are guiding for land use utilisation, and regulate land use and development. The guidelines cast light on goals and values that the planning practice should take into consideration, and how conflicting interests and concerns should be handled. An example of such a guideline is the “central government planning guidelines for diversified management of the shore zone” from 2011 (Regjeringen, 2014b). It states to that urban areas with high building pressure along the shoreline should have stronger and more strict regulations.

Third, the planning provisions is the regulatory instrument which gives legally binding provisions



ill. 28 Land use plans hierarchy

to the lower levels of government. It is however, also a national policy instrument in the sense that the regulations are formulated at the national level where the purpose is to give direction on certain topics. It is adapted when the central governments sees the necessity to put down temporary restrictions in regard to establishment of buildings or installations projects in certain areas (“Planning and Building Act,” article 6-1 - 6-3; Regjeringen, 2014b). An example of such a provision is the “national political provisions relating to shopping centres” from 2008. It states that the main goal is to nourish urban and semi-urban areas (where shopping centres should be developed) and foster environmentally friendly transportation in order to avoid urban sprawl and private car use, and in that way prevent greenhouse gas emissions (“Regulations on national provision for shopping centers (Norwegian),” article 1).

Article 6-4 in the planning and building act states that the central government can prepare a land use plan when national or regional development, construction or conservation measures are important and necessary, or when societal interests considerations requires so (“Planning and Building Act,”). This plan is however no different from a local land use plan, and is only used for exceptionally important circumstances. In that sense it does not differ much from local land use plans in the municipalities. The main difference can be said to be that the central government are able to overthrow the municipal or regional power

when creating such a plan although in reality these are usually formulated by the municipality (Regjeringen, 2014b). The planning product of the central government takes always the form of a framework or regulatory instrument although it is a national tool.

Regional Planning strategy, plan, provisions & inter-municipal planning cooperation

The regional level policies regarding planning consist of three main tools listed in chapter 7 to 9 of the planning and building act:

1. Regional planning strategy
2. Regional plan and provisions
3. Intermunicipal cooperation

Once every election period the regional authority shall prepare a regional planning strategy in cooperation with municipalities, governmental organs, organisations and institutions which are affected by the planning. The strategy has the features of a strategic land use pattern instrument as it is broad in its objectives and principles for planning, and shows development patterns. “The planning strategy shall give an account of important regional development trends and challenges, assess long-term development potentials and determine which issues are to be addressed through further regional planning” (“Planning and Building Act,” art. 7-1). It is important to note that the planning strategy is the only mandatory element regarding the regional level planning

(Regjeringen, 2008b, p. 198).

The regional plan with its provisions shall be developed if there is a necessity for it, which is stated in the regional planning strategy. The plan either applies to the whole region, for parts of the region or more specific themes for the whole or part of the region. Similar to the regional planning strategy they have the characteristics of a strategic land use pattern instrument, while the regional provisions of the plan interestingly has characteristics of a national policy and regulatory instrument. Despite it being a regional tool, it is similar in its features to the central governments planning provisions. The provisions regulate more detailed how the land specified in the regional plan can be used in greater terms. Recently new land use categories specifically developed for the regional plan was formulated which gives the regional authorities the ability to draw where the regional provisions should apply (Regjeringen, 2014a, p. 4).

Lastly, inter-municipal cooperation is put into practice when more than one municipality cooperates about planning because it is suitable to cooperate across municipal borders. As the cooperation also can make the municipal level plans, it takes on the form of the framework and regulatory instrument. However, in some cases it can take the form of strategic land use pattern instrument (“Planning and Building Act,” see art. 9-4).

Municipal Planning strategy, master plan and sub plan

Chapter 10 and 11 of the planning and building act divides the municipal planning policies into three:

1. Municipal planning strategy
2. Municipal land use plan
3. Municipal land use sub-plan

The municipality is required to formulate a municipal planning strategy. It has the purpose of discussing the municipal strategical directions in relation to its “societal development, long term land use, environmental challenges, sector activities and assessment” of the planning need. When they have assessed if there is a need for a new municipal plan, they start the formulation. It has the characteristics similar to that of the regional planning strategy.

The municipal land use plan and the sub-plan are legally binding plans. The municipal land use plan has the purpose of showing the “connection between future social development and land use”. Moreover, it “shall state the main aspects of the allocation of land and frameworks and conditions governing which new projects and new land use may be implemented, as well as which important considerations must be taken into account when allocating land” (“Planning and Building Act,” art. 11-5). The land use plan should consist of a physical land use plan, provisions and a plan descrip-

tion which states how national goals, guidelines and other plans for land use are conform with the plan. The municipal land use plan is part of the framework and regulatory instrument as we saw in chapter four. The municipal land use sub-plan is however smaller a municipal land use plan, but acts in the same way. They may be formulated in dense areas to clarify special considerations that need to be taken in contrast to the less dense areas.

Zoning Plan: Area and detailed zoning plan

In chapter 12 of the planning and building act the lower municipal zoning plans are defined:

1. Area zoning plan
2. Detailed zoning plan

Both the zoning plans are legally binding plans. As we briefly saw in chapter four the area zoning plan is part of the regulatory instruments. The detail zoning plan is likewise a regulatory instrument. The difference between the two is mainly that the area zoning plan is to be formulated by the municipality while the detailed zoning plan can be formulated by “individuals, developers, organisations and other authorities”. The zoning plans together with its provisions specify, “use, conservation and design of land and physical surroundings” according to article 12-1 in the planning and building act.

8.1 Demography and Geography

The Republic of Korea is ranked 109th in land area size, but is one of the top ranking economies and has a broad culture and art history. The industrial nation has entered several global markets such as automobile, steel making, mobile phones (and several other IT fields) and ship-building, and it is one of the leading countries in several of these markets. It is however not many years decades ago that it was a developing nation and suddenly experienced incredible economic growth and became a developed nation. This economic success has been described as 'the miracle on the Han river'.

As the map indicates, Korea is located beside Japan, China and the far eastern Russia. While South Korea is about 100,000 square kilometres, the two Koreas together make up 220,000 square kilometres.

Urbanisation history after the Korean war

After the Korean war the South Korea experienced a drastic urbanisation process which went hand in hand with the economic development. The industrialisation advanced and expanded and people flocked to the cities. This can be illustrated with an example. The urbanisation share of South Korea in 1970 was 40% when employment in secondary and tertiary industries was at 53%. In 2005 the urbanisation share was 80% when employment in secondary and tertiary industries was 92 percent (OECD, 2012, pp. 32-33). In just

35 years, the urbanisation had increased by 40 percent. Today, South Korea is one of the most urbanised and dense countries in the world, and half the population is located in one of the seven metropolitan cities.

Population: 50,220,000 (2013)

Population density: 499 inhabitants per sq. km (2012)

Land size: 97,100 sq. km, 27% productive forest and 3% agricultural areas (2014)

Topography: South Korea is a mountainous country, where mountains and inland waters makes up 75% of the land mass.



ill. 29 Map of South Korea

8.2 Relationship & history - provinces and metropolitan cities

Introduction

Urban-rural separation (Meligrana, 2004, p. 172) Making large cities into metropolitan cities and separating smaller cities from their main counties have been a trend since 1960. This has made many changes in the local governments structure. Moreover, the reforms and jurisdictional changes were inconsistent (ad-hoc), without a clear definition and theoretical foundation. This seems to have complicated the coordination of competing interest between cities and neighbouring areas.

Relationship

The jurisdictions in today's provinces have not changed much the past 100 years, the biggest change is that the metropolitan cities have gotten their independence from the provinces. Earlier four of the seven metropolitan cities had status as provincial capitals. Now, the seven metropolitan cities have the same status as provinces and are administrative units with more than a million inhabitants. The capital of Korea, which goes by the name Seoul special city, obtained its status of special city in 1949 due to its separation with Gyeonggi province in 1946, and got its placement right underneath the office of the prime minister in 1963 with the 1962 Act on Special Measures for the Status of Seoul Special City. The capital is called a metropolitan city, but has the same status as that of a province. The meaning behind the term special is important because the governor in the city of Seoul has the same status

as the ministers of the central government. The provincial and other metropolitan city governors do not have the same significance as they are one step below the ministers of the central government. Below all the metropolitan cities, counting Seoul, there are districts referred to as Gu which have the status as a municipality (other municipal level divisions include cities (si) and counties (gun). These municipalities are governed by elected council members and mayors. Below the municipalities of metropolitan cities there is an administrative unit named Dong in Korean which is of equivalent status to that of Myun and Eup in provincial counties and cities.

The democratic "local governance system with elected governors, mayors and councils" was not implemented fully until the beginning of 1990s, and is thereby quite new. Before this system came to be only the president was elected through public voting, while the governors of the province and mayors of municipalities were chosen by the president. Moreover, provincial and municipal governments did not have any representative bodies. Knowing the administrative organisation, it is important to grasp the organisation of the relations between governing bodies through historical research (Meligrana, 2004, pp. 174-175).

History

The provincial system that is used in the Republic of Korea today is one dating back to the end of the 19th century when the late Joseon Dynasty was the ruling kingdom of the peninsula. Before this period the administrative borders changed frequently due to wars. Before Korea started to modernise its nation around 1940, the rivers and mountains were the main boundaries that divided the past kingdoms. These boundaries are also the reason as to why people in the different regions of Korea identify themselves with regional characteristics, especially in the southwest and southeast regions.

Shortly after the late Joseon Dynasty came to an end, Japan colonised Korea but the provincial borders were not changed much until the Japanese colonial rule came to an end in 1945. The major change came with the division of North and South Korea. However, the provincial borders were not vastly changed, but were cut between the north and south, and both South and North Korea ended up with 9 provinces in their nations. When this division occurred the capital city, Seoul, received the status of a special city when it was separated from the Gyeonggi province, and more metropolitan cities gained such independence later on (Nahm, 1988; Seoul Metropolitan Government, n.d.-c). The reason to separate the metropolitan cities from the provinces was based on the presumption that less urban areas would be better managed without

strongly urbanised areas and opposite. The Local Autonomy Act supported "that an administrative unit with more than one million people is entitled to become a metropolitan city", and a town with 50,000 or more inhabitants was eligible for becoming a municipality (Meligrana, 2004, pp. 175-176; OECD, 2012, p. 63). Officials and politicians in eligible administrative units often wanted such "promotions". The upgrade gave benefits such as "organisational and budgetary expansions", "promotion of their status in the national and local political arenas" and when the inhabitants of these areas were expecting "increases in their local taxes, they tended to prefer promotion of their administrative units". When these upgrades were proposed for metropolitan cities however, the provinces which they are part were negative as the most important territory is that of a huge city. The province receives support from the government, so when an area with many people and businesses separates from the province, the province experiences a decrease in economic, financial and political power.

In terms of municipal borders, they have been quite similar until 1960s. After the 1960s, urban expansion made changes to the administrative units, and many territories were now classified as cities. If we look at this in perspective, we see that in 1960 twenty-four cities were a part of a municipality and in 2001 this number had escalated to 74 because of some form of change in the municipalities. Towns were promoted to become



Gogoryeo and the Three Han Federations (1st - 3rd century AD)



The Three Kingdoms and Kaya (ca. 600)



Parhae and Provinces of Unified Korea (ca. 750)



Administrative districts of Goryeo (1009 - 1392)



Eight Administrative Districts (Provinces), Provincial capitals and Key Military Bases (1392 - 1896)



New Administrative Districts (1896)



The Partitioned Korea (1945)



Republic of Korea (1982)

cities, and then new borders were drawn to differ the new cities with their host counties. Through such changes of the municipal borders new cities and metropolitan cities emerged. A problem with the provincial and municipal changes, is that it has made management of regional and urban growth difficult (Kim, Kum, & Kwon, 1998, pp. 44-48). Moreover, because the local governments in Korea were individualistic, thinking about their own administrative boundaries, more problems arose. Consequently, people involved in Korea's national political and planning agreed a change to the fragmented local government system had to come about. The government were sure that merging cities with other cities or their host counties was the best idea to prevent this from happening. This was regulated in 1994 when the current Ministry of Home Affairs laid out a vast plan for reforms of the governance. This plan has contributed to 40 integrated cities by merging 80 cities and counties (Meligrana, 2004, p. 176).

8.3 Local vs Central Government

8.3.1 Government organisation

Korea has a presidential system, where the president has the executive power of the nation. The president, together with a state council, decide all the government policies of importance. The President nominates the prime minister and has to be approved before the national assembly. The prime minister acts as the president's right-hand man, and oversees the ministries of the country and is in charge of the office for government policy coordination by instruction from the president. The national assembly is the legislative authority, which makes laws. The judiciary power lies with the supreme court.

8.3.2 The history of the Korean local government

The Korean public administration has a long story dating back to the Joseon Kingdom. However, the modern and organised public administration was not fully established before after the Joseon period despite its advancements. According to OECD, Korean public administration can be divided into three periods: (1) Before the Republic of Korea (before 1948), (2) The first five Republics (1948-1988), (3) Current period (1988-present).

Korea before Republic of Korea (before 1948)

The Korean public administration before the mid 1900's, in the Joseon Kingdom era, had a centralised government although its governance

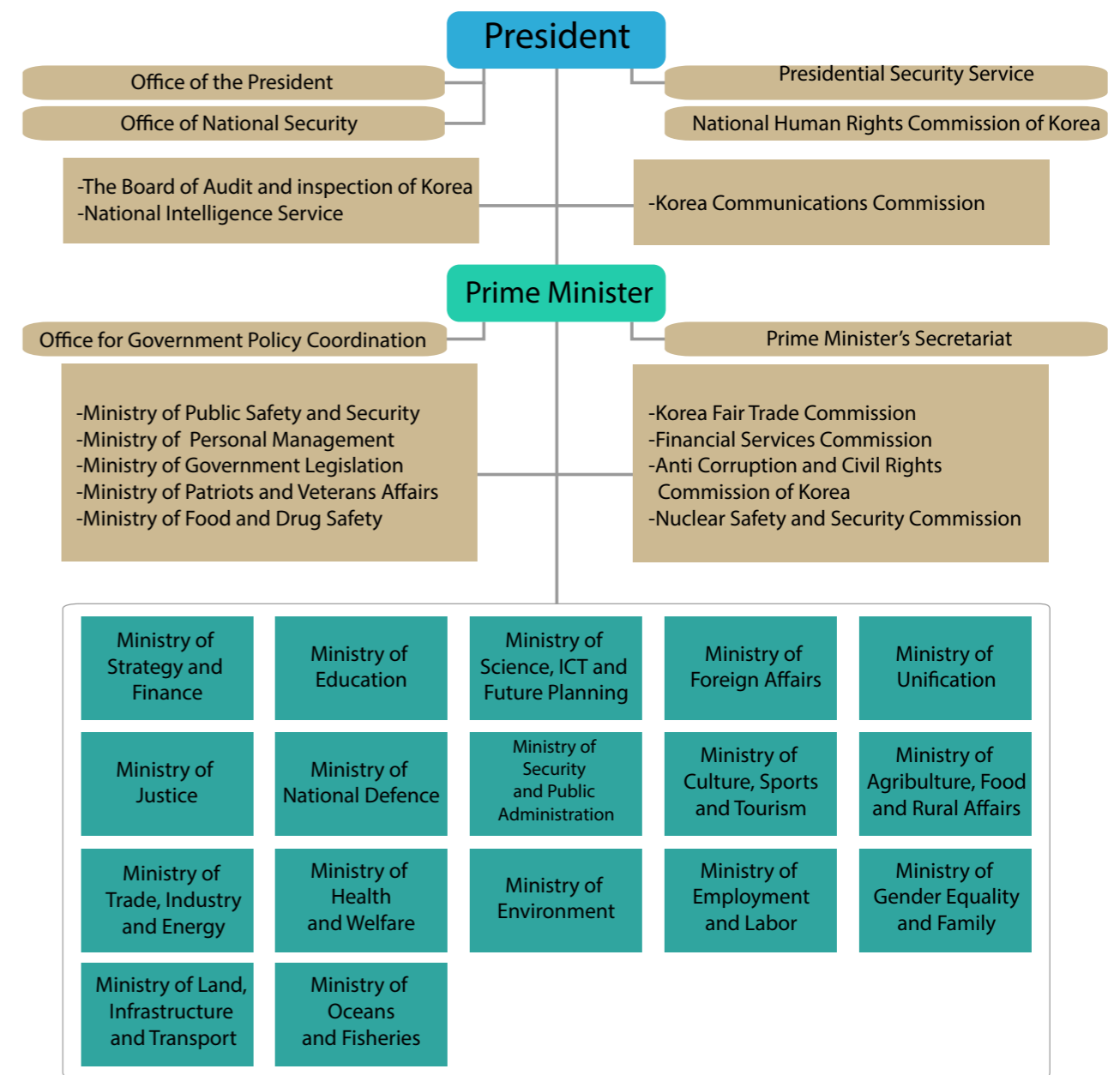
capacity was weak. The government consisted mainly of the king with whom he shared power with people of the upper class. The nobles of the upper class were divided and functioned as political parties. The governors of the local authorities were appointed by the central government, and at that time there were 340 local authorities run by the noble upper class. In the early 1900's the Joseon Kingdom became colonised by Japan and the system changed. Then the Korean nation got a strong centralised bureaucracy with legislative, executive and judicial powers, and some features of a modern administrative bureaucracy was institutionalised. Although Japan implemented a more efficient system of central administration, it suppressed the functions to the central government, and as a result the welfare functions were rather badly implemented. After the colonial rule ended, there was social chaos because of different ideologies and the cold war had started. As a result, the United States military regime ruled over the nation after the second world war to balance the situation (Esman, 2011, p. 331).

The first five Republics (1948-1988)

The Korean constitution was adopted 1948. In chapter eight of the constitution, provisions about the local autonomy is written. The two articles about the local autonomy states that:

- Article 117:“(1) Local governments shall deal with administrative matters pertaining to the welfare of local residents, manage properties,

Government Organization in South Korea



ill. 31 Government Organisation in South Korea

and may enact provisions relating to local autonomy, within the limit of Acts and subordinate statutes. (2) The types of local governments shall be determined by Act.”

- Article 118:“(1) A local government shall have a council. (2) The organization and powers of local councils, and the election of members; election procedures for heads of local governments; and other matters pertaining to the organization and operation of local governments shall be determined by Act.”

As there was a need for a complete act on the local autonomy, the local autonomy act was established one year later, in 1949. The act gave birth to local governments which had the power to formulate policies. Moreover, the members of assemblies in the local government, who could formulate policies, were elected by the residents. This was however removed by the military government which came to being in 1961. The Ministry of home affairs was instead put in charge to perform the functions of the local government together with governmental officials appointed by the president (OECD, 2001, p. 61). This was not removed before 30 years later.

Current period (1988-present)

After 30 years without public elections and a strong top-down system, a vast revision was done to the local autonomy act and finance act in

order to bring back the local autonomy. The reforms had the purpose of creating local governments which were both democratic and balanced. Yet, there were no public election of members of the assembly. This did not come back until 1995, when the system established in 1949 came back into being.

Intergovernmental relationships

The South Korean nation has had a centralised government for a long time, while the local autonomy is a body with a short history. Consequently, the intergovernmental relations is relatively new on the Korean peninsula. The idea behind the intergovernmental relations is to better the connection from the central led government down to the local led government and between the local governments to coordinate territorial development policies. In other words, these relationships play a key role: “vertical relationships between central and subnational governments and horizontal relationships between subnational governments. However, there is still areas of which local governments should receive more power. In 2001, the central government had more than 75 percent of the government function, while local governments had 25 percent (OECD, 2001, pp. 65, 77). This shows how the Korean system has had a strong top-down system. However, today the local governments have received more functions.

8.4 The governmental sub-system and its regulative tools

Organisation

As Korea has a strict top down planning system, the plans made by the higher government should always go before the lower level as it is stated in article four of the national land planning and utilisation act. This can be explained by the close relation between the planning instruments and the structure of the government. Although the top levels are more strategical as we addressed in chapter four, they have impact on the management of the lower plans in great terms. If a provincial, regional, sectoral, metropolitan, city plan is formulated or altered, this should always be approved by the central governments planning authority. The city and metropolitan plans are the lowest unit the central planning authority and therefore the lower plans such as the urban/gun, urban/gun management and district-unit plan should be coordinated with the city and metropolitan plan.

The planning authority can thus be divided into the following three levels:

1. Ministry of Land, Infrastructure and transport: national level urban planning, and dealing with infrastructure, transport, housing and land policies.
2. Metropolitan and provincial governments: regional and city level planning.
3. Local governments - City, Gun's and Gu's: rural and urban level planning.

Public administration in Provinces and Metropolitan cities

Article 2 of the Local Autonomy Act states that local governments are to be classified into two types:

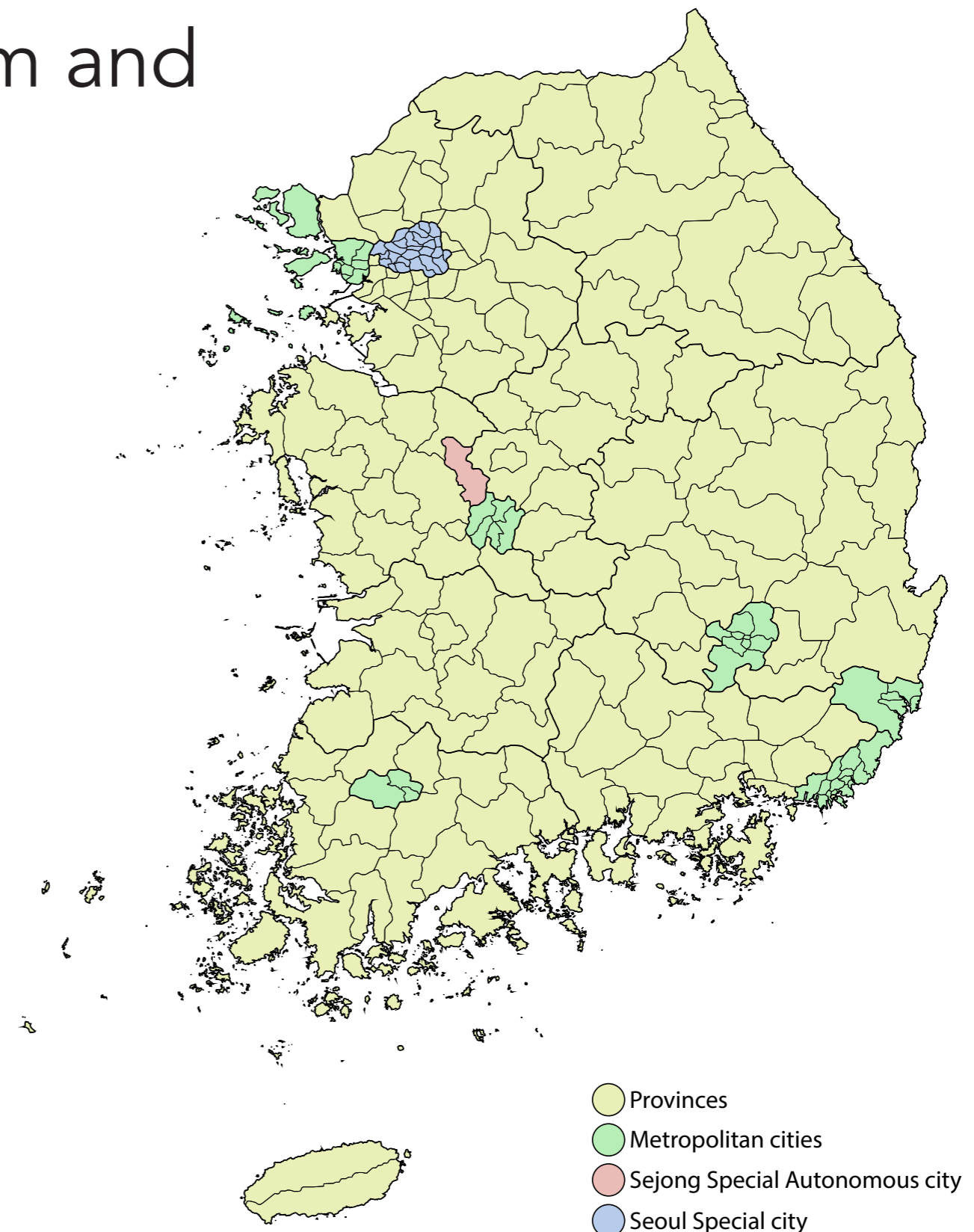
1. A Special Metropolitan City, a Metropolitan City, a Do and a Special Autonomous Do.
2. A City (Si), a County (Gun) and a Autonomous District (Gu).

Furthermore article 3 states that "The Special Metropolitan City, Metropolitan Cities, Dos and Special Autonomous Dos shall be under the direct jurisdiction of the Government. The Sis shall fall under the jurisdiction of Dos, Guns, within the jurisdiction of Metropolitan Cities or Dos, and autonomous Gus, within the jurisdiction of the Special Metropolitan City or Metropolitan Cities". ("Local Autonomy Act,")

The Local Autonomy Act define the Special Metropolitan City, Metropolitan Cities, Dos and Special Autonomous Dos (provinces) as right underneath the government, and they thereby have many similar functions as they all function at the provincial level. If we briefly look closer at the evolution of these cities and provinces we will understand some of the differences.

The Provinces (Do)

The origin of the provinces dates back to around 900 - 1000 A.D. during the first Guryeo dynasty. The borders of the provinces were divided as



ill. 32 Administrative borders

the mountains and other natural elements create a natural barrier in the landscape. The local administration system has always kept the provinces since they came to being. The boundaries and number of provinces have however changed throughout the periods of legislative reform and political regimes. As of now, the Republic of Korea has nine provinces. These are all part of what we call the upper level of the administrative system (OECD, 2001, p. 62).

Metropolitan Cities

The metropolitan cities do not have such a long history as the provinces, rather just a few decades long history. Many of these have been formed as a cause of the industrialisation and can be considered functional regions; a geographically delimited spatial system defined by the linkages binding particular phenomena in that area. Often an urban region, in which there is posited a spatially delimited network of transactions centring on an urban core, or central place, and spreading out into and functionally incorporating an urban periphery or hinterland (Gregory, 2009, p. 631). These functional regions came to being as the industry and population in cities, under the jurisdiction of provinces, was growing with increased speed. Since the establishment of the Republic of Korea, six cities have been removed from the provincial jurisdiction to create Metropolitan cities. These cities are: Busan (1963), Daegu (1981), Incheon (1981), Gwangju (1987), Daejeon (1988) and Ulsan (1997) (the parenthesis shows

the year they became a Metropolitan city). After being given the status of a metropolitan city, they became a part of the upper level of the administrative system and considered as provinces. There is no law or regulation which explains how a city can become a metropolitan city, but according to general practice, a city can separate itself from its province when the population is approaching one million inhabitants (OECD, 2001, p. 62).

Earlier we saw how the Autonomy Act classified local governments into two types. The first type was explained earlier. Now, we will look at the second type which is a city (si), county (Gun) or autonomous districts (gu). These administrative units are under the jurisdiction of special autonomous provinces, provinces, metropolitan or special cities. Below we will look at each unit, which we say are a part of the lower level of the administrative system.

Cities (Si)

A city (Si) should not be confused with the metropolitan city. The metropolitan cities have equal status to that of provinces. Cities however, are under the jurisdiction of a province. According to article 7 of the Local Autonomy Act a city (si) "shall have a population of not less than 50,000." and be of urban character in most aspect ("Local Autonomy Act,"). A city should moreover carry out the needs of its inhabitants with their own organisation and budget. Today, there are about 76 cities under the jurisdiction of province

(OECD, 2001, p. 63; 2014a, p. 29).

Counties (Gun)

Counties (gun) are known as rural administrative unit and has existed for many centuries. Today, there are about 89 guns. Underneath the administrative guns we can find Eups and Myeons. Counties can be found in provinces.

Autonomous Districts (Gu)

There are two types of districts, one is a district of metropolitan cities with autonomous power (called Jachi-Gu in Korean, but often shortened to Gu), and the second is a district under cities in provinces with no autonomous power (called Ilban-Gu in Korean, but also shortened). The autonomous districts are a part of the lower level of the administrative system, and is only present in cities with more than 500 000 citizens (OECD, 2001, p. 61).

INFOBOX 6

History of Planning and other related acts

- 1934: City Planning Act of Joseon: established and is the beginning of modern city planning on the Korean peninsula, but based on Japanese planning which was influenced by German planning tools (S. H. Kim, 2013, p. 135).
- 1962: Urban Planning Act (Replacing 1934 act)
- 1963: Comprehensive National Territorial Development Planning Act
- 1966: Land Acquisition Act
- 1970: Local Industry Development Act
Land Readjustment Act
- 1972: Act on the Utilization and Management of the National Territory (AUMNT)
House Construction Promotion Act
- 1976: Urban Redevelopment Act
- 1977: Housing Construction Promotion Act
- 1980: Urban Park Act
Natural Park Act
Forest Act
Housing Development Promotion Act
- 1981: Revision of Urban Planning Act (of 1962)
- 1982: Capital Region Growth Management Planning Act
- 1991: Natural Environment Conservation Act
Building Act
- 1994: Capital Region Resettlement Planning Act (Rep. 1982 AACR/CRGMPA)
- 2000: Urban Development Act
Act on Management of Development Restriction Area
- 2002: Framework Act on the National Land (Replacing 1963 CNTDPL)
- 2003: National Land Planning and Utilization Act (Rep. 1962 Urban Planning Act and 1972 AUMNT)
- 2005: Act on Urban Parks, Greenbelts, etc.
- 2006: Special Act on Urban Rearrangement Promotion
- 2008: Environmental Impact Assessment Act
- 2009: Low Carbon Green Growth

The instruments of the governmental sub-system

The key legislative acts regarding the planning system is the National Land Planning and Utilization Act (NLPUA) enacted in 2003, the Framework Act on the National Land (FANL) of 2002 and the Building Act of 2008.

National Land Planning and Utilization Act provides social elements and land use elements in greater detail for the local land utilization. The purpose of the act is to “contribute to the sound development of the national land and the improvement of the national welfare by providing for fundamental matters concerning the formulation and implementation of plans for and policies on the national land” (“National Land Planning and Utilization Act,” art. 1). The act represents all planning processes and the planning schemes of the national, regional, sectoral, metropolitan, city (comprehensive plan), and detailed planning unit development in the urban management plans. Framework Act on the National Land provides social elements and is a strategical way to address the issues and directions the country should move towards. The purpose of the act is to “promote public welfare and to upgrade the quality of people’s livelihood by providing for matters necessary for the formulation, implementation, etc. of plans to utilize, develop and preserve national land” (“Framework Act on the National Land,” art. 1). It declares the importance

of national planning, principles for land usage and the conservation of the land. The primary purpose of the act was to help prevent sprawl development and for the promotion of sustainable development. Building Act has the aim “to improve the safety, functions, environment, and aesthetic view of buildings, and to promote public welfare by establishing the standards for and purposes of use of sites, structures, and facilities of buildings (“Building Act,” article 1). The building act represents a building code, which sets regulations for building an individual building.

Korean planning is hierarchical, and has been throughout history. The plans made by higher levels of institutions take precedence over lower level plans, as stated in article 7 and 8 of the Framework Act on the National Land (FANL). The top levels of plans are vision-oriented with minimal detail on how the land will be used on the local level. Instead, they offer strategic plans on how development in the lower levels should be conducted. The greater vision oriented plans include the Comprehensive National Territory Plan, Metropolitan Plan and the Provincial Plan. The Gun/Si Plans, Urban Management Plan and District Unit Plan are in contrast project oriented, more detailed in plan and in explaining what the land will be used for. We will look at the vision-oriented plans before we take a look at the project-oriented.

Vision-oriented strategical plans

The framework act on the national land sets the foundation for matters which are to be addressed in the more strategical and vision-oriented plans. It explains the difference between the national, provincial, Si/Gun comprehensive plan, regional plan and sector plans. All these are part of the strategical land use patterns instrument and have strategical ways of changing the utilisation of land explained in a social aspect. In this section we will look at these plans mentioned and what their purpose is.

National Comprehensive Plan

On the national level we have the national comprehensive plan which is formulated every 20 years and reviewed every 5 years by the Ministry of Land, Infrastructure and Transport. It takes on the form of a national policy instrument, but show strategic land use patterns as the strategical elements describe below. It is “a comprehensive plan indicating a long-term direction for development of the national land, covering the entire area of the national land”. The “Do comprehensive plans and Si/Gun comprehensive plans, and sector plans and regional plans shall be in harmony with the comprehensive national land plan (“Framework Act on the National Land,” Article 6, 7, 9, 19). The national plan consist of a number of matters to address. These are matters concerning:

1. The current status of the national land and

INFOBOX 7

The two main planning acts, Framework Act on the National Land and National Land Planning and Utilization Act, are multisectoral acts. They are addressed in several acts:

- Low Carbon Green Growth
- Act on Management of Development Restriction Area
- Special Act on Balanced National Development
- Urban Development Act;
- Act on the Maintenance and Improvement of Urban Areas and Dwelling Conditions for Residents;
- Building Act;
- Management of Mountainous Districts Act
- Farmland Act,
- Natural Environment Conservation Act;
- Wildlife Protection and Management Act;
- Conservation and Management of Marine Ecosystems Act;
- Natural Parks Act;
- Cultural Heritage Protection Act;
- Framework Act on Agriculture and Fisheries, Rural Community and Food Industry;
- Local Autonomy Act
- Harbor Act;
- Industrial Sites and Development Act;
- Housing Site Development Promotion Act;
- Road Act
- Tourism Promotion Act
- Parking Lot Act
- Forest Resources Creation and Management Act
- Environmental Impact Assessment Act;
- Rearrangement of Agricultural and Fishing Villages Act;
- Work against Land Erosion or Collapse Act.
- Grassland Act;
- Framework Act on the Regulation of Land Use

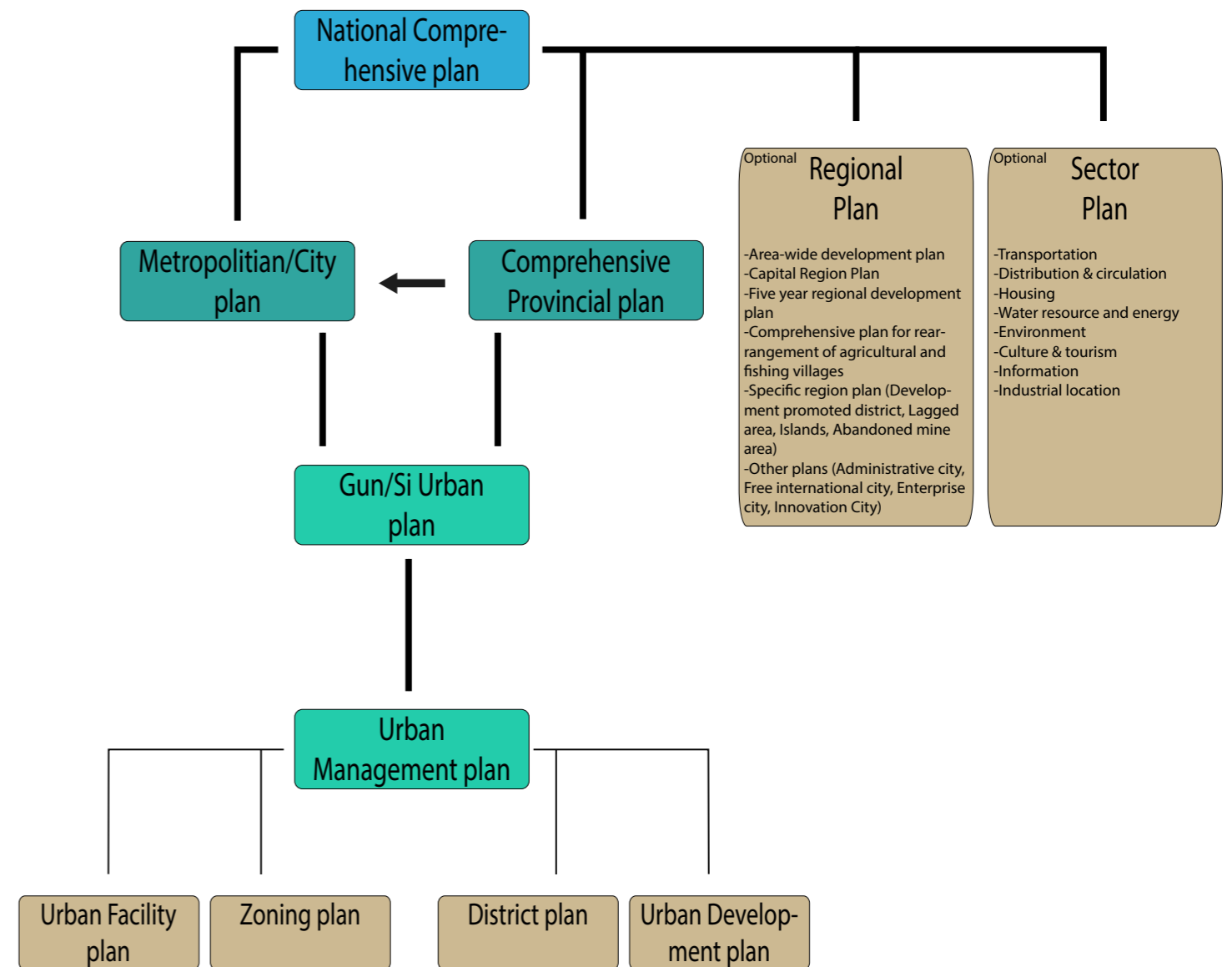
the outlook of any changes in the given conditions;

2. The basic ideas for national land development and the establishment of desirable future images of the national land;
3. Improvement of the spatial structure of the national land and a direction for sharing the functions by region;
4. The policies for the balanced development of the national land and concerning the fostering of regional industries;
5. The elevation of national competitiveness and the expansion of the infrastructure of the national land forming the basis for nationals' living;
6. The efficient utilization and management of national land resources, such as land, water resources, forest resources, and marine resources;
7. The creation of living conditions, such as housing and water supply and sewerage systems, and the improvement of the quality of life;
8. The prevention of flood damage, wind damage, and other disasters;
9. The rational utilization and management of underground spaces
10. The conservation and improvement of national land environments for the sustainable development of the national land
11. Other matters incidental to subparagraphs 1 through 10.

The plan has been of great importance since the separation from the after the Korean war. There was a need to build up the nation as the land and economy was wrecked. The government saw the need to establish a long term plan which could manage the land use, lay the outline for future infrastructure investments, population reorganisation, for management of industrialised cities, provide balanced development and other issues that needed to be solved.

Provincial Comprehensive Plan

Under the national plan we can find provincial comprehensive plans. Provincial plans shall be made by a provincial Governor ("Framework Act on the National Land," Article 13). This plan is "a comprehensive plan indicating a long-term direction for development of the jurisdictional area of a Do or a Special Self-Governing Province, covering the entire area of the relevant region". The establishment of this plan "form the basis for Si/Gun comprehensive plans to be formulated within the jurisdictional area of the relevant Dos ("Framework Act on the National Land," Article 6, 7). Each province established these plans as of 1981 and 1982. However, the province of Gyeonggi could not make this plans until recently. The provincial plan can be defined as a strategic land use pattern instrument. The plan consist of a number of matters to address. These are matters concerning:



ill. 33 Land use plans hierarchy

1. The analysis of current status and peculiarity of the region and concerning the outlook of any changes in internal and external conditions;
2. Objectives and strategies for the regional development;
3. The improvement of the region's spatial structure and directions for sharing the functions within the region;
4. The construction of the infrastructure, such as transportation, logistics, and information and communications network;
5. The development, conservation and management of resources and environments within the region;
6. The utilization of land by purpose and its planned management;
7. Other matters required for the sustainable development of the Do, which are prescribed by Presidential Decree.

Si/Gun comprehensive plan

The FANL then explains a si/gun comprehensive plan. This is a strategical land use pattern instrument. Which is "a plan indicating the basic spatial structure and a long-term direction for development of the jurisdictional area of a Special Metropolitan City, a Metropolitan City, a Si, or a Gun (excluding any Gun in a Metropolitan City), covering the entire area of the relevant region, which is formulated for land utilization, traffic, environment, safety, industry, information and communications, health, welfare, culture, etc. as

a part of an urban plan under the National Land Planning and Utilization Act ("Framework Act on the National Land," Article 6). These plans are regulated under the NLPUA which will be discussed after explaining the regional and sector plan which are regulated under the FANL.

Regional plans

According to the FANL the Regional plan is "formulated in order to achieve the objectives of special policies in a specific region, covering the entire area thereof". They are established by the head of a central administrative agency, or local government when it is necessary for consolidation or development which is suitable for local peculiarities ("Framework Act on the National Land," Article 6, 16). This takes the form of a strategical land use pattern instrument. Examples of such plans are:

1. Seoul Metropolitan area development plan
2. Metropolitan zone development plan
3. Specific area development plan
4. Development plan for a development-promotion district
5. Other regional plans formulated under other Acts

Sector plans

Sector plans are however "indicating a long-term direction for development of a specific sector, covering the entire area of the national land." These are established through a decision made

by the head of a central administrative agency but can only have content related to the individual sector duties ("Framework Act on the National Land," Article 6, 17). Examples of such sector plans can be a transportation, environment, culture & tourism etc. They are known as national policy instruments.

Project-oriented and regulating plans

The plans we have investigated so far is regulated by the Framework Act on the National Land. Now, we will take a look at the rest of the plans which are regulated in the National Land Planning and Utilization Act. We will take a look at the Metropolitan plan, urban/Gun plan, urban or Gun management plans and district-unit plan. It is important to note that all the plans made by the local governments are legally binding plans, these are part of the lower level of administrative system. The metropolitan plan which is not part of the lower administrative system

Metropolitan plan

The metropolitan plan is defined as "a plan to set long-term development directions for Metropolitan planning zones designated under Article 10 (Article 2, 10). It can be defined as both a strategic land use pattern and framework (master plan) instrument. It covers the metropolitan cities, cities, and the more special areas including Seoul Special Metropolitan City, Sejong Special

Autonomous City and Jeju Special province. The plan shall be made and is put together by the mayor, Do mayor or a head of a Si or Gun and is required to include the following policy direction-setting:

1. Matters concerning the spatial structure and division of functions of a metropolitan planning zone.
2. Matters concerning the management system of green areas and conservation of the environment in a metropolitan planning zone.
3. Matters concerning arrangement, size and installation of metropolitan facilities.
4. Matters concerning a scenery plan.

Borough plans (Urban/Gun plan)

The urban/gun plan used to be two separate plans as the name of the plan derives from. The urban refers to an area in a city, while gun refers to a rural county, however these were integrated into one urban-rural plan in the national land planning and utilization act of 2003. The urban/Gun plan is a comprehensive plan which sets "basic spatial structures and long-term development directions for the jurisdictions of the Special Metropolitan City, a Metropolitan City, Special Self-governing City, Special Self-governing Province or a Si/Gun, which forms guidelines for formulating urban or Gun management plans". The plan shall be made, should be formulated by the Mayor or head of the jurisdictions mentioned

above, and is made for 20 years with revisions every 5th year. The plan consists of a number of matters which work as a policy direction-setting for the area (Article 2, 18, 19, OECD 2006). The matters which are discussed in the plan are:

1. Matters concerning local features and direction-setting and objectives of a plan;
2. Matters concerning spatial structure, establishment of living zones and distribution of population;
3. Matters concerning the utilization and development of land;
3. Matters concerning the supply and demand of land by each use;
4. Matters concerning the conservation and management of the environment;
5. Matters concerning infrastructure;
6. Matters concerning parks and green areas;
7. Matters concerning sceneries;
8. Matters concerning response to climate change and energy conservation;
9. Matters concerning the prevention of disasters and safety;

Borough (Urban/Gun) management plans

The urban/Gun management plans is a term used to specify plans “on land utilization, traffic, environment, scenery, safety, industries, information and communications, health, welfare, security, culture, etc., which are formulated to develop, improve and preserve the Special Metropolitan City, a Metropolitan City, Special Self-governing

City, Special Self-governing Province or a Si/Gun”. The plan shall be made, and should be formulated by the Mayor or head of the jurisdictions mentioned in the last sentence (Article 2, 24). However, residents can also formulated such a plan and propose it to the local government. It can be defined as a regulatory instrument. The plan is made every for a duration of ten years and is reviewed every five years (OECD 2006).

District-Unit Plan

The district-unit plan is a detailed urban/gun management plan which is “developed to rationalise the land utilization, to increase its functionality, to improve aesthetics, to secure better environment, and to manage the relevant area in a systematic and planned manner, for part of an area subject to the formulation of an urban or Gun plan”. The plan has the features of a regulatory instrument. The plan is formulated based on the consideration of a number of matters (Article 2, 49). These are:

1. The purpose of designation of a district-unit planning zone, such as urban improvement, management, preservation and development;
2. The core functions of a district-unit planning zone, such as residence, industry, distribution, tourism and recreation and complex;
3. Characteristics of the relevant specific-use areas;

8.5 Summary and findings

Chapter seven and eight described the two public administration in Norway and Korea respectively. Through the descriptive chapter about the public administration in Norway, we briefly saw that the local governments are quite autonomous, however with directions from the central government: the subsidiarity principle. Consequently, some tensions between the local and central government has taken place. We investigated the organisation of the governmental sub-system, and saw the development of the planning law from a mere controlling tool for city design to a holistic approach towards sustainable development. In terms of instruments in the governmental sub-system, we saw a number of helpful instruments such as the planning guidelines and strategies help to direct the direction planning in local and regional governments.

In chapter eight we analysed the Korean public administration. This chapter provided less information about the local governments role, but gave some insight into the administrative difference between a province and metropolitan city. Having said that, the chapter showed that local autonomy is a new element in the Korean nation, and that a strict central governmental sub-system is visible. The different laws in the governmental sub-system was introduced, and a number of plans were investigated in order to get insight about the different instruments. The different land use instruments showed signs of green growth conformity in the matters they addressed.

Although the chapter was only able to provide basic insight into the Korean public administration, it has been of help to give answers to some of the partial research questions.

One of the questions we needed more information about was 'how OECD's green growth strategy is represented in the planning products of Norway and South Korea'. This was the question we discussed in chapter four, but did not give a complete answer as the we needed more information about green growth and the processes in the governmental sub-system which have led to the planning products. As we saw in chapter six, the Korean metropolitan and provincial governmental sub-systems are required to follow up on the implementation green growth in much greater detail than the local government. It is rather important to note that the local action plans for green growth are made separately from the land use plan. Having said that, the central government encourages green growth to be put into practice in local land use plans in article 49 of the framework act on green growth act. Other than the mentioned changes in chapter six, no findings of this was made in chapter eight about Korean public administration. In contrast, Norway did not show any changes in chapter five nor chapter seven. Although there are no findings of green growth in the governmental sub-system, if an implementation of a green growth policy was stronger it would most certainly be stated as a national policy in i.e. the national expectations

document like other international goals are implicated. Nevertheless, Norway did not show any way type of implementation of the green growth policy despite the green growth conform plans shown in chapter four. I would however say the Norwegian governmental sub-system is conform with the green growth strategy developed by OECD. The reason for this is that sustainable development is emphasised in planning and sustainable policies in Norway are conform to OECD's green growth strategy.



Part III

9. Analysis

Having looked upon supranational agreements, green growth in planning products, green growth as a policy, governmental sub-systems and the public administration in Norway and South Korea, we can see some similarities between the countries. The green growth indicators used for analysing the different planning products showed several factors of where green growth was expressed in the plan. What the brief investigation of the planning products did not show was how the planning system as a governmental sub-system, the public administration and policies contribute and lay the foundation for the different physical planning products, whether it takes the role of a more strategical plan or a more regulatory plan. In this chapter on analysis, the background information provided in the previous chapters will form a base for comparing the two countries in the context of OECD's green growth strategy. After having compared the different aspects on the two countries in the context of OECD's green growth strategy, we will attempt to give an answer to the research question of this paper. However before this, we will compare the two countries in light the four partial research questions. The analysis will consist of the four following topics:

- The planning system as an institutional technology to implement international policy
- Green growth in the national policies of sustainable development

- Changes made to the public administration to adapt to green growth
- OECD's Green Growth Strategy in planning products

The planning system as an institutional technology to implement international policy

In chapter three we partially answered 'how a planning system was designed as an institutional technology to implement an international policy'. What we did not answer was how this went from the national level to the local level, we will discuss this shortly. Before this, we will take a look at nations relationship to international policies to contextualise the two nations relationship to OECD and possible reasons for implementation of such policies. The reason we look into this now, is to understand the countries relationship to OECD which is central in this research. Although we briefly touched upon this topic in chapter three, it did not explain the whole picture.

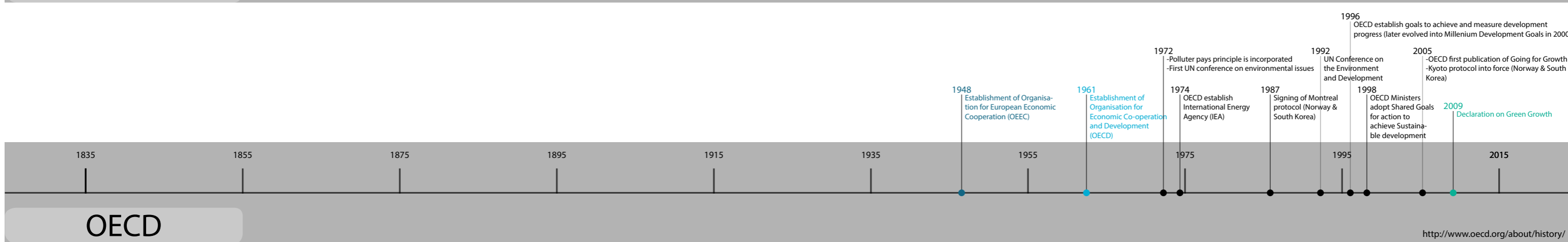
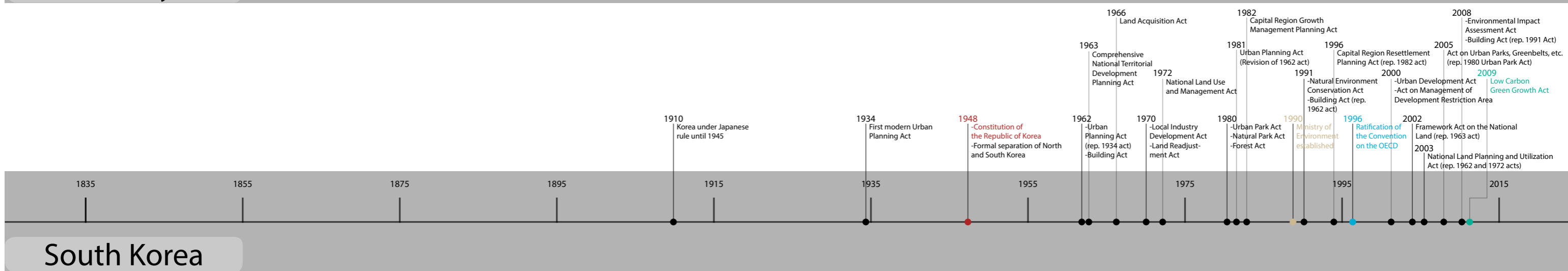
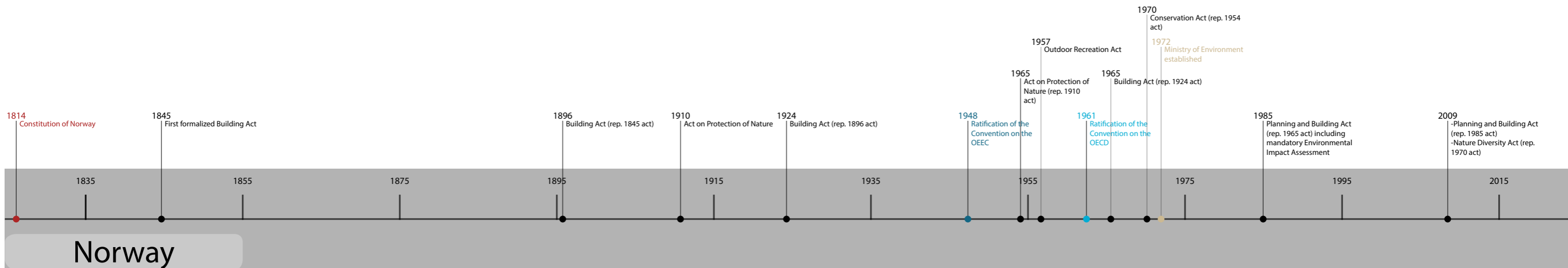
Green Growth and Supranational Policies

Although the provided list over the international conventions and agreements, especially related to the environment and its protection, is far from complete it gives us a picture of the direction Norway and South Korea want to move towards. Ratification of supranational policies into the

national level is rather often wanted. All national states have reasons to ratify a policy. They may be driven to sign the agreements and to act in accord with them because of "self-interest, public pressure, reputation, horse-trading", all which are political reasons (Chang, 2010). What there is less interest for is the legally binding commitments that come as a result of the ratification. Nevertheless, although some of the listed supranational policies in chapter three have legal measures, they do not have the same power as a sovereign nation's law does. An example of this is Canada's withdrawal from the Kyoto-protocol in order to prevent penalties as the country rather than decreased, increased its emissions notably (The Guardian, 2011). One could thus say there are two factors which has significant importance. First, the mechanisms for implementation of international policies is limited as the state is the sovereign power and has the choice to sign or discard it. Second, the nations actions towards the international policy is what in reality makes an international policy effective (Chang, 2010).

Both Norway and South Korea have many agreements which both have signed, but just a few have been described earlier. The ratification of the OECD convention was an agreement which was signed by the two nations at quite different times. Norway became a member of the OECD already in 1961, the early ratification can be explained by the membership it had in OEEC (the former OECD) from 1948. South Korea however, be-

came a member in 1996, 35 years later. The reason for the late membership can be explained by the Korean situation at the time after the Korean war. Korea had just got their constitution and the peninsula of Korea was split into two nations. Many industrial factories were located in North Korea and thus North Korea had some foundation. On the other hand, South Korea was a poor nation and was in the process of building up the nation. Strong development continued and the nation experienced vast economic growth during the period from the 60s to the 90s, which is known as 'the miracle on the Han river'. During the 1980s however, the nation realised that continuous development without quality would not be sustainable for the future generations. Introduction of regulatory tools became important, such as the Capital region growth management planning act of 1982 played an important role in handling the problems related to overpopulation in the capital, and the Natural environment conservation act which was enacted in 1991. A few years later South Korea ratified the convention on the OECD. It is however important to note that most of the members in OECD are wealthy nations, and has therefore been criticised (OECD Observer, 2003). After Korea introduced the national vision for 'low carbon green growth', they pushed OECD to make it an international policy which could contribute other nations as well. An official declaration of green growth was then made by OECD in 2009, but the green growth strategy report was completed two years later



ill. 34 History of laws, OECD, Green growth conform acts and institutions

which became a tool for member nations.

In chapter three we found that through ratification of a convention, in this case OECD's convention, nations commit to work towards the goals or objective stated in the convention. Therefore the OECD Declaration on green growth is a policy they are committed to. Thereby according to Chang (2010) the first factor regarding implementation of international policies is completed. The second factor is whether the nations take action towards the international policy. Canada can be portrayed as an example of a sovereign nation which completed the first step but was not able to achieve the second, as mentioned above. The second step is where the governmental sub-system is important as an action-taker towards an international policy, such as the green growth policy. The Norwegian governmental sub-system has national policy instruments which can be utilised in order for the implementation of such policies to the lower governments in the system. This includes the national expectations or planning guidelines. The instruments are available, but it is the government who needs to take action in order for it to be utilised. Korea on the other hand formulated completely new national policy instruments such as the National Strategy for Low Carbon Green Growth in order to practice green growth in the country. Moreover, green growth urban planning guidelines were formulated to help the imple-

mentation of green growth in the different levels of governments. In European countries planning instruments such as the Korean National Strategy for Green Growth in Korea binds the lower level governments, as there is a hierarchical structure to the spatial planning instruments. Unless green growth directions come through the central government, the local governments or local citizens can take this responsibility. How can this be done in Norway and South Korea? As Green growth is a means of achieving sustainable development, this argument could be used for implementing it in the local governments. Sustainability is goal and policy in both nations, and should consequently be of interest to the central government when local governments work towards green growth. An interesting remark concerning local initiatives, is that Seoul Metropolitan Government made separate bus lanes in the central city and out to satellite cities to make public transportation an attractive choice. This happened however before Korea established a national policy about green growth. Therefore it would be more interesting to see if there are any projects specifically directed towards green growth in Norway, as the policy is available but no specific actions directly towards it has been done. However, the Korean example shows that policies do not necessarily need to start from the central government although this has been the tradition in Korea. In Norway, initiatives seem to start from the local government as they have more autonomous power. Moreover, the citizens

of a municipality have more power to make a difference in the planning, in opposition from the strong top-down approach in Korea. Citizens participation and consultation in the planning process can thus send signals to authorities. As a result, we can conclude that the international policy do not necessarily need to start from the central government in order to be utilised in the governmental sub-system in these two cases. In that way it could become a bottom-up approach where the different levels of governments make use of it regardless of the central governments actions towards green growth.

Green growth in the national policies of sustainable development

In chapter five and six we answered what role green growth plays in the national policies of sustainable development. We will look at the findings, and discuss them more deeply.

Based on the findings from chapter five and six we saw that the growth policy was more apparent in Korean policies. Numerous Korean indications show that there is significant green growth practice in the national government. This indication was further strengthened through the analysis of the land use plans in Korea in chapter four. As we mentioned in the findings in from chapter five and six, green growth appears to have taken precedence above sustainable development in

Korea. Especially, the change of the presidential committee from sustainable development to green growth show how extensive the focus on green growth is. The focus on sustainable development is however not gone, simply the focus has changed. All the Korean green growth policies mentioned in the paper are also applicable to the concept of sustainable development. Nevertheless, by focusing on environment and economy, instead of the extra social aspect which in reality does not apply to developed nations, seems to be an easier approach. Moreover, the concept further enhances the economic development in an environmental and attractive way towards individuals, organisations, businesses etc. It is attractive, first, in the sense that there are rather few if any nations with a comprehensive national goal with clear strategical instruments which promote economic advancement through environmentally friendly solutions. Secondly, the last president which introduced the green growth concept believed that innovation was the key to economic growth, and therefore a reform would help the economy to continue to grow. In contrast, Norway has had strong focus on sustainable development. Indications to changes toward green growth has not happened as a result of OECD's introduction of the green growth strategy. Yet, there is green growth conformity in the Norwegian system and its policies. A formal implementation of green growth seems to be a conformity process. Nonetheless, according to the findings in the chapter on land use plans there are indica-

tions that show more will-power in Korea. This is however dependent on many external forces which is beyond what the governmental sub-system can control.

The establishment of the sustainable development concept in Norway can be said to have begun with the report 'Environment and Development' from 1989 which adopted the Brundtland report. In spite of that, Norway obtained its own constitution already in 1814 where the idea of sustainable development was stated as a provision in article 112. The first constitution of the Republic of South Korea was first established in 1948 after the separation of North and South Korea. Article 122 of the constitution, similar to the Norwegian, states the idea of sustainable development. The sustainable management and planning of the land resources have consequently had a shorter history in the Republic of Korea. It is rather evident that the focus of the Norwegian government has been sustainable development while the Korean government focuses on green growth. On top of that, the two countries seem to match with the history of the concepts as we explained in chapter two. Sustainable development started from the environmental movement where the limits to growth was important. Green growth on the other hand, started from environmental-economic policy-makers, who thought growth was important. Norway has been a pioneer in early implementation of regulatory tools such as the 1910 Act on Protection of

Nature and institutions such as the ministry of environment. In contrast, after the Korean war the nation of Korea appear to have focused on development to boost the economy without much concern for the environment until recently. However, this is a very general statement which is built on my perception of these cases through this research. Although there is a difference between the two concepts the correlation is vast, which we can see through OECD's green growth statement: green growth is a means of reaching sustainable development.

Changes made to the public administration to adapt to green growth

In the findings of chapter five to eight we investigated if and how the public administration has been altered to adapt to the green growth policy. We will discuss this before we go on to the last partial research question.

In chapter five we saw no indications to changes in the Norwegian public administration after the introduction of green growth. The only governmental document which says something about green growth is one that refers to the OECD. In the document it is stated, "Through participation in OECD's work, the government will support and build on the knowledge in the organisation and transfer it to a Norwegian context. The government will participate in the formulation of a new framework for calculations and development of new indicators for green growth that

can reveal deficiencies and measure progress." However, these indicators have not yet been seen despite the document is four years old. To my surprise, in march the parliament sent out a notice that they have started to develop these indicators (Stortinget, 2015). What changes this will bring about will be interesting.

Excluding the recent update, no significant changes which has occurred as a result of the introduction of green growth can be seen. With the introduction of drawing rules and land use categories for the regional plan (as explained in chapter seven), there could seem to have been changes. However, this has not come as a consequence of the green growth policy. Unlike Korea, Norway does not have land use categories for research facilities or research complexes in the same manner Korea does. Investigating Korean changes in planning functions such as land use categories and zones requiring special consideration has not been successful as available information has been scarce. In contrast to Norway, the Korean system show numerous clear alterations in order to adapt to the green growth policy. Changes such as the establishment of a presidential committee for green growth, framework act on low carbon green growth, development of the national green growth strategy with five year plans, implementation of local action plans, the central governments power to establish green growth policy tools, urban planning guidelines and the founding of GGGI's predecessor. The presidential com-

mittee on green growth is moreover the highest body for coordination the national green growth strategy of the nation. From this point of view, we see a that innovative elements have been introduced, both arenas to discuss and committees to coordinate. A reform has thus taken place which has changed the system radically. As these changes were mentioned in chapter six they have not been mentioned in chapter eight which refers to the Korean governmental sub-system. However, the changes we see in the public administration is what we discussed earlier in chapter six.

It is however important to note that South Korea is considered the first nation to have formally established the green growth concept. Additionally, it was the Korean government whom pushed the green growth policy upon OECD in order to implement it as an international policy. Consequently, it is rather important to realise that it was not OECD's policy which made alterations to the nation, it was Korea's own introduction of the green growth concept in 2008. Korea's goal was not only to make green growth an international policy, but also to spread it to other nations. Consequently, the current Global Green Growth Institute has become of great importance to give practical and local support to developing nations in the fields of energy, water, land use and green city development (GGGI, 2015, p. 32). GGGI has the mission of "supporting the transition of GGGI Member countries towards a green growth model by developing and imple-

menting strategies that simultaneously achieve poverty reduction, social inclusion, environmental sustainability and economic growth“ (GGGI, n.d.) In doing so, the aim is to foster green growth and help the developing nations to reduce greenhouse gas emissions.

Norway, in contrast to Korea has however been a pioneer in the field of sustainable development. Even if we look at a renowned environmental performance Index, Norway is ranked the 10th most environmental while Korea is ranked as 43rd (Yale University, 2014, p. 10). The world's first Ministry of Environment was established in Norway, and the early nature preservation laws give a view upon this. In Korea however, new institutions needed to be made to adapt to green growth. Having said this, the framework act on low carbon green growth consists of the previous energy use act, recycle energy promotion act, sustainable development act and the climate act. We can thus again see that sustainability has been an important factor in Korea.

OECD's Green growth strategy in planning products

In this section we will discuss how the OECD green growth strategy is represented in the planning products of Norway and South Korea. In order to answer this fully we will take a look at the planning acts conform to green growth before drawing conclusions from the analysis of

the planning products.

Planning Acts conform with Green Growth
The current legal framework contains not only regulatory and framework instruments, but additionally what the planning theory refers to as national policy and strategic land use patterns. Other elements include green growth conform regulatory tools such as zones requiring special consideration (art. 11-8 and 12-6) and impact assessment (art. 4-2).

From the illustration of the laws history, we see how the Korean planning act was completely revised a few times before the National Land Planning and Utilization Act of 2003 was introduced. This act contains regulations for the physical planning product that give development rights. It is thus mainly directed towards the framework and regulatory instruments. It is important to mention that the act, as the Norwegian, includes regulatory tools such as the impact assessment (art. 27), different levels of zones requiring special consideration (art. 8) and own specific tools for infrastructure establishment (art. 43). As we saw in chapter four, only the district-unit plan had zones for special consideration.

The second planning act is more general in its form in order to set directions for the general national land use on the national, regional and city area. This is the Framework Act on the National Land of 2002. These two acts are fine-

tuned together in order for the sustainable management and utilisation of the land. Finally in 2009 when the Framework act for Green Growth was introduced, green growth was something that had to be put into practice by the upper level administrative system (provinces and metropolitan cities). Guidelines were also provided to local governments in order to promote green growth in the local administrative units.

Then, how is the green growth strategy represented in the planning products of Norway and South Korea? In chapter six we saw that the Korean metropolitan and provincial governmental sub-systems were required to follow up on the implementation green growth in much greater detail than the local government. These local action plans that they are required to make are however made separately from the land use plans as these often take the form of a strategic land use pattern instrument.

In the Norwegian planning products there were indications to conformity with green growth in the different level of plans. All the plans included notes about environmentally friendly transport and quality for the wellbeing. The less strategical planning instruments, showed focused on resource utilisation, greens and effective energy usage in buildings. The land use categories showed many elements, but the zones requiring special considerations only consisted of rather vague elements related to green growth. Moreover,

Norway did not show any way type of implementation of the green growth policy in the governmental sub-system despite the green growth conform plans shown in chapter four. If an implementation of a green growth policy was stronger it would most certainly be stated as a national policy in i.e. the national expectations document like other international goals are. Nevertheless, I would however say the Norwegian governmental sub-system is conform with the green growth strategy developed by OECD. The reason for this is that sustainable development is emphasised in planning and the sustainable policies in Norway are conform to OECD's green growth strategy.

In contrast, all Korean planning products except for the district-unit plan shows indications of conformity to green growth in almost all the four indicators developed by OECD. Similar to Norway, the Korean plans emphasises environmentally friendly transportation, greens and better energy usage with reference to renewable energy. However, what differed the Korean system from the Norwegian was the focus on R&D, where innovation and new ways of creating better and more environmentally friendly areas were emphasised. Both the land use categories in the regulatory planning products showed greens. However, the urban management plan showed land use categories for research complex and a waste disposal treatment facility. Furthermore, the lowest regulatory instrument showed little interesting elements related to the zones requir-

ing special consideration.

Based on the information above we can see how OECD's green growth strategy is represented in the planning products of Norway and Korea. The findings show many similar characteristics in the Korean and Norwegian planning levels. Moreover, there is certainly conformity to elements of green growth which is represented in both countries. Nevertheless, Korea showed more signs of vast changes in reaching green growth especially through focus on research, renewable energy and significant investments in environmentally friendly transportation. All Korean planning instruments showed several green growth features, and it seems obvious that the Korean levels of government are more conform in their practice. This should not come as a surprise considering the numerous initiatives and policies they have towards green growth in the nation. Consequently, based on the findings in the paper we can conclude that OECD's Green Growth Strategy is represented in the planning products of the two nations, but rather explicitly in the Korean planning products.

10. Conclusion

This paper has discussed how an international policy concerning green growth is reflected in two differentiating national planning systems. Through the analysis of the two governmental sub-systems, green growth elements and the planning products, we can see how they are interrelated. Through the research we could see many similarities, but also differences between the instruments. I will outline the most significant differences. The main differences were the different type of national policy and strategic land use pattern instrument. In Norway we do not have a national plan with a spatial development perspective like the comprehensive national territorial plan in Korea, rather we have a general policy statement on certain topics like in the national expectations document. On the regional level the Norwegian strategic land use pattern instruments are used as for strategic plans, and the municipal plan can also have strategic elements. Norway is thus, slightly different from the majority of European countries. The Korean in turn, has a formal strategic planning structure with a lot of responsibility for the strategic instruments. Nevertheless, as we saw in the metropolitan plan this also has the features of a strategic land use pattern.

Then, how is international policy concerning green growth reflected in two differentiating national planning systems?

Through the discussion of the four partial research questions we found that the planning system is designed to implement an international policy. Nevertheless, although the planning system is designed for it there needs to be a will to ratify a policy, and if the policy is ratified, action by the central government is required. In the Norwegian system there has been a will to work towards OECD's policies. However, in the field of green growth, little has been done. Nevertheless, this seems to be loosening up with the soon-to-come green growth indicators that the government is working towards.

The second question is then, Which role does green growth play in the national policies of sustainable development? Green growth plays a central role in sustainable development policies. The Norwegian system is conform to the green growth policies of Korea, which we could see by the goals of the Norwegian policies. Additionally as green growth is a means of reaching sustainable development.

The third question is, what changes or reforms have been made in public administration in order to adapt to a policy for green growth and facilitate its implementation? Even though Norway

has accepted the green growth policy, little work has been done. Consequently, there are no indications to change since the acceptance as there has been in Korea.

Lastly, how is OECD's Green Growth strategy represented in the planning products of the two cases, Norway and South Korea? We have found significant indications that Korea's planning system is conform to OECD's Green Growth policy. Norway, has conform elements, and is able to formulate green growth plans without the establishment of new institutions or new regulatory tools. As explained earlier, the national guidelines or expectation document should be sufficient national policy instruments to put the green growth policy into practice.

The Norwegian planning and building act stated that plans should contribute to the implementation of conventions and agreements. In this paper we have looked at how the green growth policy developed by OECD has been implemented into the Norwegian planning system and in what way it is shown in land use plans. As Norway is a part of OECD and signed the Declaration on Green Growth one would assume the policies should be discerned in the government. The policy where green growth was written, stated that green growth is something they support. However, even though there is green growth conformity in the land use plans these are pres-

ent because Norway has a history of sustainable development policy. However, despite my research I have only found signals that implementation can be done.

Further Research

As we have understood, no new tools or innovative elements in order to implement the green growth policy in Norway has been established. However, this was because Norway already had a regulatory framework which could handle policies regarding sustainable development. There may come a time when a new policy comes about in a field Norway is lagging behind or do not have the right tools to implement. How will this change Norway? And where is the limit to what types of policies that can be implemented? This is something which needs to be investigated in further detail, as Norway was conform to the green growth policy.

Bibliography

Agency for Planning and Building. (2013). Filipstad area regulation - Quality assurance program. from <http://web102881.pbe.oslo.kommune.no/saksinnsyn/showfile.asp?jno=2013065173&fileid=4059956>

Böhringer, C. (2003). The Kyoto Protocol: A Review and Perspectives. *Oxford Review of Economic Policy*, 19(3), 451-466. doi: 10.1093/oxrep/19.3.451

Bratberg, T.T.V. (1995). Byggningsloven 150 år : 1845-1995 : lovens opprinnelse og utvikling. Steinkjer: Kommunal- og arbeidsdepartementet i samarbeid med Forvaltningsmuseet i Steinkjer.

Building Act, Pub. L. No. 11998 (Korea Legislation Research Institute 20.01.1962).

Callicott, J. B., & Frodeman, R. (2009). *Encyclopedia of environmental ethics and philosophy* Vol. 2. Detroit: Gale.

Chang, H. (2010). A “Legally Binding” Climate Agreement: What Does it Mean? Why Does it Matter? Retrieved 03.05, 2015, from <http://blogs.ei.columbia.edu/2010/02/23/a-“legally-binding”-climate-agreement-what-does-it-mean-why-does-it-matter/>

Chu, J. M., Li, X., Kojima, S., Kim, Y. G., Park, J. H., Yoon, H., & You, E. S. (2011). *Comparative Study on Green Growth and Green Economy in Korea, China and Japan*. Seoul: Korea Environment Institute.

Chung, Y.-K., & Hwang, K. (2006). *The Korean National Strategy for Sustainable Development* (pp. 77).

. Convention on Biological Diversity: Convention text. (2001). S.I.: Secretariat of the Convention on Biological Diversity, CBD.

Edwards, M. (2012). Evaluating the effectiveness of OECD economic surveillance. Retrieved 08.05, 2015, from <http://pirate.shu.edu/~edwardmb/OECDreport.pdf>

Ekardt, F., & Hovel, A. v. (2009). Distributive Justice, Competitiveness, and Transnational Climate Protection: “One Human - One Emission Right”. *Carbon & climate law review*, 12.

eSenior. (2015). About the project. Retrieved 21.04, 2015, from <http://www.esenior.no/?CatID=1185>

Esman, M. (2011). Berman, M. Jae Moon, and Heungsuk

Choi, eds. (2010). *Public Administration in East Asia: Mainland China, Japan, South Korea, and Taiwan*. *Public Organization Review*, 11(1), 95-96. doi: 10.1007/s11115-010-0150-3

European Commission. (1997). *The EU compendium of spatial planning systems and policies* (Vol. 28): European Communities.

Falkner, R. (2013). *The Handbook of global climate and environment policy*. Chichester: Wiley-Blackwell.

FN Sambandet. (n.d.-a). Climate convention (Norwegian). Retrieved 13.02, 2015, from <http://www.globalis.no/Avtaler/Klimakonvensjonen>

FN Sambandet. (n.d.-b). Convention on Biological Diversity (Norwegian). Retrieved 14.02, 2015, from <http://www.globalis.no/Avtaler/Konvensjon-om-biologisk-mangfold>

FN Sambandet. (n.d.-c). Convention on the Rights of the Child (Norwegian). Retrieved 17.02, 2015, from <http://www.globalis.no/Avtaler/Barnekonvensjonen>

FN Sambandet. (n.d.-d). Kyoto-protocol (Norwegian). Retrieved 13.02, 2015, from <http://www.globalis.no/Avtaler/Kyoto-protokollen>

Framework Act on Low Carbon Green Growth, Pub. L. No. 10599 (Korea Legislation Research Institute 13.01.2010).

Framework Act on the National Land, Pub. L. No. 11690 (Korea Legislation Research Institute 23.03.2013).

GGBP. (2014). *Green Growth in Practice: Lessons from Country Experiences* (pp. 234). Retrieved from <http://www.ggbp.org/report/green-growth-practice-lessons-country-experiences>

GGGI. (2015). *GGGI Strategic Plan 2015 - 2020 Accelerating the Transition to a New Model of Growth* (pp. 45). Seoul, South Korea: GGGI.

GGGI. (n.d.). Overview - Mission. Retrieved 03.02, 2015, from <http://ggi.org/about-gggi/background/organizational-overview/>

Gregory, D. (2009). *The Dictionary of human geography* (5th ed. ed.). Chichester: Wiley-Blackwell.

Grønning, M. (2015). Whole in one! - Et slag for helheten. Retrieved 01.05, 2015, from <http://www.ks.no/PageFiles/68031/Whole%20in%20one!%20-%C2%A0et%20slag%20for%20helheten,%20M.%20Grønning%2020150209.pdf>

Gyeonggi Province. (2012a). Gyeonggi Province to Stand Tall as Center of Northeast Asia in 2020! Retrieved 16.02, 2015, from <http://eng.gg.go.kr/archives/17048>

Gyeonggi Province. (2012b). *Gyeonggi Provincial Comprehensive Plan 2012 - 2020 Summary report* (Korean) (pp. 60).

Healey, P., & Williams, R. (1993). *European Urban Planning Systems: Diversity and Convergence*. *Urban Studies*, 30(4-5), 701-720. doi: 10.1080/00420989320081881

IISD. (2005). *A summary report of the Fifth Ministerial Conference on Environment and Development in Asia and the Pacific*. 106. <http://www.iisd.ca/download/pdf/sd/sdvol-106num1e.pdf>

Jacobs, M. (1999). *Sustainable Development as a Contested Concept. Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*: Oxford University Press. doi: 10.1093/0198294891.001.0001

Julsrud, O. (2012). *Between heaven and earth : glimpse from the 40 years with the Ministry of Environment* (Norwegian). Oslo: Unipub.

Kim, Kum, & Kwon. (1998). *Local Government Restructuring and Boundary Adjustments in Korea* (Korean). Seoul: Korea Local Administration Research Institute.

Kim, S. H. (2013). Changes in Urban Planning Policies and Urban Morphologies in Seoul, 1960s to 2000s. *Architectural Research*, 15(3), 133-141. doi: <http://dx.doi.org/10.5659/AIKAR.2013.15.3.133>

KRIHS. (2011). *The Revised Fourth Comprehensive National Territorial Plan (2011-2020)*: Korea Research Institute for Human Settlements (KRIHS).

Local Autonomy Act, Pub. L. No. 10827 (Korea Legislation Research Institute 14.07.2011).

Mahon, R., & McBride, S. (2008). *OECD and Transnational Governance*. Vancouver, BC, CAN: UBC Press.

Mathews, J.A. (2012). Green growth strategies—Korean initiatives. *Futures*, 44(8), 761-769. doi: <http://dx.doi.org/10.1016/j.futures.2012.06.002>

Meligrana, J. (2004). *Redrawing local government boundaries: an international study of politics, procedures and decisions*. Vancouver: UBC Press.

Ministry of Environment. (n.d.). *History of Ministry of Environment*. Retrieved 06.02, 2015, from <http://eng.me.go.kr/eng/web/index.do?menuId=6&findDepth=1>

MOCT, & KRIHS. (2001). *The Fourth Comprehensive National Territorial Plan in Korea (2000 - 2020)*. Republic of Korea: Retrieved from http://www.mltm.go.kr/upload//N_INFO_ROOM//20031008145200_□□4□□□_□□.pdf

Moon, J. H., Jang, E. G., Park, J. H., & Kang, M. J. (2013). *National Territorial and Regional Development Policy: Focusing on Comprehensive National Territorial Plan*.

Municipality of Oslo. (2014). *Filipstad - Planning proposal for political discussion: Area regulation*. Retrieved 02.04, 2015, from <http://web102881.pbe.oslo.kommune.no/saksinnsyn/showfile.asp?jno=2015003871&fileid=4852533>

Municipality of Oslo. (2015a). Smart, Safe, Green - Municipal plan 2015: Oslo towards 2030 (Social element). Retrieved 20.04, 2015, from <https://www.oslo.kommune.no/getfile.php/Innhold/Politikk%20og%20administrasjon/Kommuneplan/Vedlegg%201-Høringsutkast-Kommuneplan%202030.pdf>

Municipality of Oslo. (2015b). Smart, Safe, Green - Municipal plan description 2015: Oslo towards 2030 (Land use element). Retrieved 19.04, 2015, from <https://www.oslo.kommune.no/getfile.php/Innhold/Politikk%20og%20administrasjon/Kommuneplan/Vedlegg%202-Høringsutkast-%20Kommuneplan%202030-Juridisk%20del.pdf>

Municipality of Oslo. (n.d.). Filipstad. Retrieved 02.04, 2015, from <https://www.oslo.kommune.no/politikk-og-administrasjon/prosjekter/fjordbyen/filipstad/>

Nahm, A. C. (1988). Korea: tradition & transformation : a history of the Korean people. Elizabeth, N.J., U.S.A: Hollym International Corp.

National Land Planning and Utilization Act, Pub. L. No. 11292 (Korea Legislation Research Institute 01.02.2012).

Nature Diversity Act, Pub. L. No. 100 (Lovdata 01.07.2009).
Norwegian Forest and Landscape Institute. (n.d.). What is an indicator? (Norwegian). Retrieved 10.04, 2015, from http://www.skogoglandskap.no/faq/1170099594.18/default_view

OECD. (2001). OECD Territorial Reviews: Korea 2001: OECD Publishing.

OECD. (2006). OECD Environmental Performance Reviews: Korea 2006: OECD Publishing.

OECD. (2007). OECD Territorial Reviews: Norway 2007: OECD Publishing.

OECD. (2009). Declaration on Green Growth. Retrieved 28.01, 2015, from <http://webnet.oecd.org/OECDACTS/Instruments/ShowInstrumentView.aspx?InstrumentID=70&InstrumentPID=67&Lang=en&Book=False>
OECD. (2010). OECD Economic Surveys: Norway 2010 (Vol. 2010): OECD Publishing.

OECD. (2011). Towards Green Growth: OECD Publishing.

OECD. (2012). OECD Urban Policy Reviews, Korea 2012: OECD Publishing.

OECD. (2014a). Compact City Policies: Korea - Towards Sustainable and Inclusive Growth: OECD Publishing.

OECD. (2014b). Green Growth Indicators 2014: OECD Publishing.

OECD. (n.d.-a). About the OECD. Retrieved 11.02, 2015, from <http://www.oecd.org/about/>

OECD. (n.d.-b). Convention on the Organisation for Economic Co-operation and Development. Retrieved 27.01, 2015, from <http://www.oecd.org/general/conventionontheorganisationforeconomicco-operationanddevelopment.htm>

OECD. (n.d.-c). Key OECD documents on green growth. Retrieved 23.02, 2015, from <http://www.oecd.org/green-growth/keydocuments.htm>

OECD. (n.d.-d). OECD Legal Instruments. Retrieved 28.01, 2015, from <http://www.oecd.org/legal/legal-instruments.htm>

OECD Observer. (2003). The OECD: Securing the future. Retrieved 20.05, 2015, from http://www.oecdobserver.org/news/archivestory.php/aid/1197/The_OECD:_Securing_the_future.html

Oxford English Dictionary. (n.d.-a). Agreement. from <http://www.oed.com/view/Entry/4159?redirectedFrom=agreement#footerWrapper>

Oxford English Dictionary. (n.d.-b). Think tank. Retrieved 08.05, 2015, from <http://www.oed.com/view/Entry/200809?redirectedFrom=think+tank#eid>

Planning and Building Act, Pub. L. No. 71 (Lovdata 01.07.2009).

Plansamarbeidet. (2014). Regional plan for areal og transport i Oslo og Akershus - Høringsforslag (pp. 72). Retrieved from <http://plansamarbeidet.no/filetype/horingsforslag/>

Presidential Commission on Green Growth. (2010). Road to Our Future: Green Growth - National Strategy and the Five-Year Plan (2009~2013) (pp. 23). Seoul.

Regjeringen. (2003). Better municipal and regional planning by the planning and building act (Norwegian). Retrieved from <https://www.regjeringen.no/contentassets/a8cb45e34aeb40cd8fae53343158a172/no/pdfs/nou200320030014000dddpdfs.pdf>.

Regjeringen. (2007). Norwegian strategy for sustainable development (Norwegian) (pp. 88): Ministry of Finance. Regjeringen. (2008a). Ot.prp. nr. 32 (2007-2008). Retrieved from <https://www.regjeringen.no/contentassets/feaa16f059aa4db2b6ba095abf47c924/no/pdfs/ot-p200720080032000dddpdfs.pdf>.

Regjeringen. (2008b). Ot.prp. nr. 32 (2007-2008). Retrieved from <https://www.regjeringen.no/contentassets/feaa16f059aa4db2b6ba095abf47c924/no/pdfs/ot-p200720080032000dddpdfs.pdf>.

Regjeringen. (2011). Business Development and Green Growth - Governmental strategy for environmental technology (Norwegian). Retrieved from <https://www.regjeringen.no/contentassets/6460d9aad1ca481b8f31df9194e9651fk-0715.pdf>.

Regjeringen. (2012). Government and Municipality - Management and Cooperation (Norwegian). Retrieved from <https://www.regjeringen.no/nb/dokumenter/meldst-12-20112012/id671829/>.

Regjeringen. (2013a). National Transport plan 2014- 2023 - a boost for environmental transportation (Norwegian). Retrieved 18.02, 2015, from <https://www.regjeringen.no/nb/aktuelt/nasjonalt-transportplan-2014-2023---et-lo/id722910/>

Regjeringen. (2013b). Report No. 33 (2012-2013) Climate adaptation in Norway (Norwegian). Retrieved from <https://www.regjeringen.no/contentassets/e5e7872303544ae38bdbdc82aa0446d8/no/pdfs/stm201220130033000dddpdfs.pdf>.

Regjeringen. (2014a). Nasjonal produktspesifikasjon for arealplan: Del 2.2 – Spesifikasjon for tegneregler, regionale arealplaner. Retrieved 03.05, 2015, from https://www.regjeringen.no/contentassets/81768f821f1748e8b9ab687f31471723/regionalplan_tegneregler_12des2014.pdf

Regjeringen. (2014b, 29.04.2014). National framework and planning functions. Ministry of Local Government and Modernisation. Retrieved 10.04, 2015, from <https://www.regjeringen.no/en/topics/planning-housing-and-property/plan--og-bygningsloven/planning/engelsk-test---planning-in-norway/engelsk-test---8-4/id710322/>

Regjeringen. (2014c, 02.05). Norway can be world leading in green growth (Norwegian). Retrieved 19/04, 2015, from <https://www.regjeringen.no/nb/aktuelt/norge-kan-bli-verdensledende-innen-gronn/id750421/>

Regjeringen. (2014d). Responsibilities and tasks of the Ministry of Environment. Retrieved 05.03, 2015, from <https://www.regjeringen.no/nb/dep/kld/dep/id673/>

Regjeringen. (2015). Report No. 13 (2014-2015) New emission commitment for 2030 - a joint solution together with EU (Norwegian). Retrieved from <https://www.regjeringen.no/contentassets/07eab77cc38f4085abb594a87aa19f10/no/pdfs/stm201420150013000dddpdfs.pdf>.

Regjeringen. (n.d.). Article 3-1. Tasks and considerations in planning for law (Norwegian). Retrieved 05.02, 2015, from https://www.regjeringen.no/nb/dokument/dep/kmd/veiledninger_brosjyrer/2009/ny-versjon-lovkommentar-til-plandelen-i-/kapittel-3-oppgaver-og-myndighet-i-plan/-3-1-oppgaver-og-hensyn-i-planlegging-et/id556748/

Regulations on national provision for shopping centers (Norwegian), Lovdata (01.07.2008).

Rinne, R. (2008). The Growing Supranational Impacts of the OECD and the EU on National Educational Policies, and the Case of Finland. *Policy Futures in Education*, 6(6), 665-680. doi: 10.2304/pfie.2008.6.6.665

ROM Eiendom. (2013). Reguleringsbestemmelser for Filipstad. Retrieved 02.04, 2015, from <http://web102881.pbe.oslo.kommune.no/saksinnsyn/showfile.asp?jno=2013047821&fileid=3996635>

Sejong Special Autonomous City. (n.d.-a). Procedures for Establishment - Metropolitan Planning Process (Korean). Retrieved 27.02, 2015, from <http://www.sejong.go.kr/jsp/InfoCategory/CityConstruction/PORPlanWideCity01.sjp>

Sejong Special Autonomous City. (n.d.-b). Procedures for Establishment - Urban Management Planning Process (Korean). Retrieved 17.02, 2015, from <http://www.sejong.go.kr/jsp/InfoCategory/CityConstruction/PORPlanCityManage01.sjp>

Seoul Metropolitan Government. (2009). Urban Planning of Seoul (pp. 87).

Seoul Metropolitan Government. (n.d.-a). 2030 Seoul Master Plan. Retrieved 04.03, 2015, from <http://english.seoul.go.kr/policy-information/urban-planning/urban-planning/1-2030-seoul-basic-urban-plan/>

Seoul Metropolitan Government. (n.d.-b). 2030 Seoul Plan (draft). Retrieved 25.02, 2015, from <http://www.slideshare.net/simrc/pdf2030-seoul-plan>

Seoul Metropolitan Government. (n.d.-c). Joseon Dynasty - The Second Republic (Korean). Retrieved 16.02, 2015, from <http://www.seoul.go.kr/v2012/seoul/review/general/josun.html>

SH Corporation. (n.d.-a). Green energy. Retrieved 26.02, 2015, from http://www.i-sh.co.kr/e_mgk/m_31/wpge/plan_eng_content.do

SH Corporation. (n.d.-b). Park, Green land plan. Retrieved 03.03, 2015, from http://www.i-sh.co.kr/e_mgk/m_23/wpge/plan_gland_system.do

SH Corporation. (n.d.-c). Project Strategy - Development Goal. Retrieved 03.04, 2015, from http://www.i-sh.co.kr/e_mgk/m_11/wpge/biz_strg_goal.do

SH Corporation. (n.d.-d). Project Summary. Retrieved 03.04, 2015, from http://www.i-sh.co.kr/e_mgk/m_5/wpge/biz_summary.do

SH Corporation. (n.d.-e). Traffic Plan. Retrieved 27.02, 2015, from http://www.i-sh.co.kr/e_mgk/m_27/wpge/plan_trff_transport.do

SINGG. (n.d.). Background & History. Seoul Initiate Network on Green Growth. Retrieved 10.02, 2015, from <http://www.singg.org/en/about/background/index.do>

Skou Andersen, M., & Liefferink, D. (1997). *European environmental policy : the pioneers*. Manchester: Manchester University Press.

SPERI. (2014, 05. 27). The OECD: more than just a think tank. from <http://speri.dept.shef.ac.uk/2014/05/27/oecd-tank/>

SSB. (2015). *Minifacts about Norway* (pp. 64): Ministry of Foreign Affairs.

Statistics Korea. (2012). *Korea's Green Growth based on OECD Green Growth Indicators* (pp. 46).

Steigan, P., & Lid, D.T. (1997). *Caplex : leksikon, atlas, tabellverk* ([Ny utg.]. ed.). Oslo: Cappelen.

Stortinget. (2015). *Innst. 194 S (2014–2015)*. Retrieved 09.05, 2015, from <https://www.stortinget.no/no/Saker-og-publikasjoner/Publikasjoner/Innstillinger/Stortinget/2014-2015/inns-201415-194/?l=0#a5.1.1>

The Guardian. (2011). What does Canada's withdrawal from Kyoto protocol mean? Retrieved 29.04, 2015, from <http://www.theguardian.com/environment/2011/dec/13/canada-withdrawal-kyoto-protocol>

UNDESA. (2012). *Green Economy, Green Growth, and Low-Carbon Development – history, definitions and a guide to recent publications*: UN Division for Sustainable Development.

UNEP. (2011). *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication* (pp. 44).
UNESCAP. (n.d.). *Ministerial Conference on Environment and Development, Fifth Session*. Retrieved 10.02, 2015, from <http://www.unescap.org/events/ministerial-conference-environment-and-development-asia-and-pacific-2005>

United Nations. (1989). *Convention on the Rights of the Child*. Retrieved 16.02, 2015, from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>

United Nations. (1992a). *Report of the United Nations Conference on Environment and Development*. Retrieved 18.02, 2015, from <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>

United Nations. (1992b). *United Nations Framework Convention on Climate Change (UNFCCC)*. Retrieved 15.02, 2015, from http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf

United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. Retrieved 14.02, 2015, from <http://www.un.org/disabilities/convention/conventionfull.shtml>

United Nations. (2012). *Future Perfect* (M. Witthaus, C. Rowlands, & J. Griffiths Eds.): Tudor Rose.

United Nations. (n.d.-a). *Green Growth*. Division for Sustainable Development. Retrieved 10.02, 2015, from <https://sustainabledevelopment.un.org/index.php?menu=1447>

United Nations. (n.d.-b). *Some Facts about Persons with Disabilities*. Retrieved 15.02, 2015, from <http://www.un.org/disabilities/convention/facts.shtml>

World Bank. (2012). *Inclusive Green Growth: The Pathway to Sustainable Development* (pp. 171). Retrieved from http://siteresources.worldbank.org/EXTSDNET/Resources/Inclusive_Green_Growth_May_2012.pdf

Yale University. (2014). *2014 Environmental Performance Index World Economic Forum* (Ed.) (pp. 170). Retrieved from http://epi.yale.edu/files/2014_epi_report.pdf

Young, S. (2009). *Korea's 'Green Growth' as a response to concern for progress and well-being*. Paper presented at the 3rd OECD World Forum, Busan, South Korea. <http://www.oecd.org/site/progresskorea/44112574.pdf>

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11. Thirteen Different definitions of the term Green Growth

1. Aims to foster economic growth and development while ensuring that natural assets and environmental services are protected and maintained. The approach places a premium on technology and innovation — from smart grid systems and high-efficiency lighting systems to renewable energies including solar and geothermal power — as well as on improving incentives for technology development and innovation (Global Sustainability Panel, 2011).
2. Fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies (OECD, 2011).
3. A policy focus for the Asia Pacific region that emphasises environmentally sustainable economic progress to foster low-carbon, socially inclusive development (UNESCAP website).
4. Is, in general terms, economic progress that fosters environmentally sustainable, low-carbon and socially inclusive development. Pursuing green growth involves outlining a path to achieving economic growth and well-being while using fewer resources and generating fewer emissions in meeting demands for food production, transport, construction and housing, and energy (UNESCAP, 2012).
5. Is about making growth processes resource-efficient, cleaner and more resilient without necessarily slowing them. Development that is green [which here means resource-efficient], clean and resilient (World Bank, 2011).
6. Is the new revolutionary development paradigm that sustains economic growth while at the same time ensuring climatic and environmental sustainability. It focuses on addressing the root causes of these challenges while ensuring the creation of the necessary channels for resource distribution and access to basic commodities for the impoverished.” (GGGI website).
7. Green growth is growth that “emphasises environmentally sustainable economic progress to foster low-carbon, socially inclusive development”. The OECD definition is similar but emphasises also green investment as “a driver for economic growth” (UN DESA – Rio+20 Objectives and Themes of the Conference).
8. It is growth that is efficient in its use of natural resources, clean in that it minimises pollution and environmental impacts and resilient in that it accounts for natural hazards (World Bank, 2012).
9. Is growth that is efficient in its use of natural resources, clean in that it minimises pollution and environmental impacts, and resilient in that it accounts for natural hazards and the role of environmental management and natural capital in preventing physical disasters. And this growth needs to be inclusive. Inclusive green growth aims to operationalise sustainable development by reconciling developing countries’ urgent need for rapid growth and poverty alleviation with the need to avoid irreversible and costly environmental damage (World Bank, 2012).
10. Growth achieved by saving and using energy and resources efficiently to reduce climate change and damage to the environment, securing new growth engines through research and development of green technology, creating new job opportunities, and achieving harmony between the economy and environment (RoK Framework Act on Low Carbon, Green Growth, 2010).
11. Defined as environmentally sustainable progress that fosters low-carbon, socially inclusive development (Government of Cambodia, 2009).
12. An emerging concept that recognises that environmental protection is a driver of global and national economic development. It refocuses society on achieving qualitative growth rather than simply increasing GDP (Government of Rwanda, 2011).
13. Means “job creation or GDP growth compatible with or driven by actions to reduce green house gases.” (Green Growth Leaders, 2011).

See (UNDESA, 2012, pp. 63-64)

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