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Key Issues on Green Economy at Rio+20

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Institute for Global Environmental Strategies (IGES)

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Acronyms and Abbreviations

EU	European Union
GDP	Gross Domestic Product
GGGI	Global Green Growth Institute
GHG	Greenhouse Gas
GNI	Gross National Income
GNP	Gross National Product
MDGs	Millennium Development Goals
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
QOL	Quality of Life
SDGs	Sustainable Development Goals
SEEA	The System of Environmental-Economic Account
UNEP	United Nations Environment Programme
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organisation

Summary

This paper discusses the key issues surrounding green economy at Rio+20 in three categories: ‘principles of a green economy’, ‘policy tools for transition towards green economies’ and ‘international cooperation for green economies’. The discussion is based on current trends in the discussion of green economy in the Rio+20 process, which can be apprehended in the zero draft published in January 2012, and from views and opinions expressed by the G20 (Group of Twenty) countries during the Rio+20 process meetings.

The wide variety of views on green economies poses the great challenge of creating a single common definition. If we do not insist on a strict definition, we can establish an understanding that a green economy is a means to achieve sustainable development and that each nation can develop a green economy according to its development levels and priorities. Demonstrating differences in development levels, some countries argue that a green economy should be based on the principle of common but differentiated responsibilities, whereas other countries highlight the roles of emerging economies. Because the conventional dichotomy between developed and developing countries may impede negotiations, a discussion framework should be formulated to break through this potential bottleneck situation. Plenty of countries call for prevention of green protectionism, but a common understanding of green protectionism may not necessarily exist among all countries due to insufficient discussion, e.g., of the definition of green protectionist policies. Accordingly, to prevent future conflicts between countries, these issues should be debated concretely at an early stage.

The following four measures are discussed herein as policy tools for the transition toward green economies: a toolbox of good practices, green economy indicators, a green economy roadmap and Sustainable Development Goals (SDGs). The expected positive effects on each country of a toolbox of good practices will lead to an agreement between the countries to create such a toolbox at Rio+20. However, the contents of the other three measures are considered ambiguous based on the diversity of current arguments. If the countries wish to launch processes for creating these tools at Rio+20, we should consider a discussion framework that will be useful at this stage, e.g., involving clarification of the relationship between green economy indicators and the green growth indicators developed by the Organisation for Economic Cooperation and Development (OECD), consideration of a discussion framework to create a roadmap with goals and indicators, and discussion of SDGs based upon the Millennium Development Goals (MDGs). A common understanding of the value of creating new policy tools and constructing efficient processes will be essential.

International cooperation for green economies focuses on technology transfer, financial assistance and capacity building. Discussions of concrete mechanisms to promote them seem insufficient at present. It may be difficult to establish such new schemes at Rio+20, although it will provide a good opportunity to set up fundamental stages for discussion on concrete mechanisms. Newly proposed schemes will address several issues, e.g., the role and authority of centres of excellence for green technology, security of international equality for innovative financial mechanisms and compatibility of a capacity development scheme with the principle of non-intervention in internal affairs and prevention of new aid conditionalities.

Based on the global goal to create sustainable societies free from poverty, we should adopt a backcasting way of thinking. This approach will allow us to identify and focus on important matters regarding which agreements must be reached at Rio+20.

Introduction

Twenty years have passed since the Earth Summit in 1992. Rio+20 will soon provide another chance to discuss sustainable development, and ‘green economy in the context of sustainable development and poverty eradication’ and ‘institutional framework for sustainable development’ have been raised as major issues for discussion in addition to assessment of progress and emerging issues.

This paper focuses on the green economy and will review key issues related to this concept. Chapter 1 will review the preliminary discussion and introduce the Zero Draft of the outcome document for Rio+20 that is published by the secretariat. Chapter 2 considers consistency of and changes in national opinions by reviewing perceptions of the green economy expressed by the Group of Twenty (G20) during the preparatory process in chronological order. Based upon these two chapters, Chapter 3 discusses the key issues surrounding green economy to be discussed at Rio+20 in three categories, namely, ‘principles of a green economy’, ‘policy tools for transition towards green economies’ and ‘international cooperation for green economies’. Lastly, in Chapter 4, the points for further discussion will be presented.

1. Trends in the Discussion of the Green Economy in the Rio+20 Process

In this chapter, a series of green economy discussions that have taken place in the Rio+20 process is reviewed, followed by introduction of the Zero Draft of the outcome document for Rio+20.

1.1. Development of Discussion on the Green Economy in the Rio+20 Process

Two Preparatory Committee Meetings and one Intersessional Meeting held by the UNCSD have played key roles in the discussion of the green economy (as of February 2012) ¹.

At the First Preparatory Committee meeting held in May 2010, most countries recognised that a green economy is a means to achieve sustainable development in the context of their respective national circumstances. Some countries expressed concern about the possibility of new trade barriers and commercialisation of nature. Improvement of energy efficiency, promotion of sustainable consumption and production, introduction of green taxation and internalisation of externalities were discussed as concrete measures. The importance of multi-stakeholder participation and international cooperation, including technology transfer, was also mentioned. Some countries submitted a request to the Secretariat to prepare plans for establishing a green economy and expressed the opinion that concrete outcomes, such as a green economy roadmap, should be produced following Rio+20.

The debate during the First Intersessional Meeting held in January 2011 proceeded on the basis of the Synthesis Report edited by the Secretariat, which compiled responses to the questionnaire distributed to member countries, international bodies and major stakeholders beforehand. Most respondents began to endorse a green economy as a means of realising sustainable development at this point. Debate on the content of a green economy also began to take shape, and stakeholders' concerns were divided roughly into two categories. The first concern are international issues, such as support for developing countries and the potential for environmental policies to hinder equity of trade (green protectionism); the second category of concerns involves domestic issues, such as decoupling of economic growth from environmental burden and green taxation schemes, including environmental taxes.

¹ The Second Intersessional Meeting in December 2011 focused on the structure of the outcome document.

At the Second Preparatory Committee meeting held in March 2011, the most actors ever, i.e., 44 member countries and organisations, had opportunities to express their views. Attention was focused more on concrete international issues related to the prior discussion than on the definition of a green economy. The debate revealed interest in international support for technology transfer, financial assistance and capacity building for a global transition towards a green economy, and avoidance of green protectionism in international trade. The following three expected outcomes of Rio+20 have attracted attention from many countries: a global commitment to a green economy; a UN green economy roadmap; and a toolbox or best practice guide.

1.2. Discussion of the Green Economy in the Zero Draft

The Zero Draft of the outcome document at Rio+20 was published in January 2012, aggregating a wide variety of opinions submitted from member countries, international bodies and major stakeholders by 1 November 2011 with the debate that took place at the Second Intersessional Meeting. The articles relevant to a green economy that are included in the Zero Draft will be reviewed briefly in this section.

The Zero Draft consists of five chapters in total. A green economy is mainly discussed in Chapter 3, which categorises relevant issues into three sections: ‘A. Framing the context of the green economy, challenges and opportunities’; ‘B. Toolkits and experience sharing’; and ‘C. Framework for action’.

The Zero Draft touches upon the principles of a green economy, including its challenges and opportunities: a green economy should be based on the Rio principles, in particular the principle of common but differentiated responsibilities (CBDR), and should be people-centred and inclusive, providing opportunities and benefits for all citizens and all countries. It is also stressed in the Zero Draft that a green economy is a means to achieve sustainable development, which must remain the overarching goal, and that each country will make the appropriate choices with respect to its development level, particular conditions and priorities. The Zero Draft mentions the necessity of support for developing countries in light of their great challenges. It also argues that new trade barriers and new aid conditionalities must be prevented.

The creation of an international knowledge-sharing platform is suggested under the topic of toolkits and experience sharing. Concrete steps toward this goal include a menu of policy options, a toolbox of good practices, a set of indicators to measure progress, and a directory of technical and financial assistance.

As a framework for action, the Zero Draft encourages each nation to develop its own green economy strategies, with support from the United Nations (UN) for developing countries. Because enabling conditions for building green economies must exist, the following suggestions are made: provision of new, additional and scaled-up sources of financing to developing countries; launching of an international process to promote the role of innovative financial mechanisms; gradual elimination of subsidies that have negative effects on the environment; creation of Centres of Excellence for green technology R&D; and establishment of a capacity development scheme to provide country-specific advice. Business and industry are encouraged to develop their own green economy roadmaps with concrete goals and benchmarks of progress. Simultaneously, global progress can be measured with a roadmap that includes the indicative goals and timeline shown in Figure 1.

In addition to the above discussion of the green economy, relevant topics are found in Chapter 5, ‘Framework for action and follow-up’, especially in sections B, ‘Accelerating and measuring progress’, and C, ‘Means of implementation’.

Sustainable Development Goals (SDGs) and Gross Domestic Product (GDP) are mainly addressed in section B. An inclusive process will be launched to devise by 2015 a set of global SDGs that are universal and applicable to all countries while allowing for differentiated approaches among countries. SDGs are viewed as a tool to complement and strengthen the Millennium Development Goals (MDGs) in the development agenda for the post-2015 period, with their primary focuses on sustainable consumption and production patterns, oceans, food security and sustainable agriculture, sustainable energy for all, water access and efficiency, sustainable cities, green jobs, opportunities for work and social inclusion, and disaster risk reduction and resilience. It has been proposed that progress toward the MDGs be measured by appropriate indicators and specific targets to be achieved possibly by 2030. The limitations of GDP as an indicator of well-being are discussed, followed by an explanation of the necessity of developing and strengthening indicators to complement GDP.

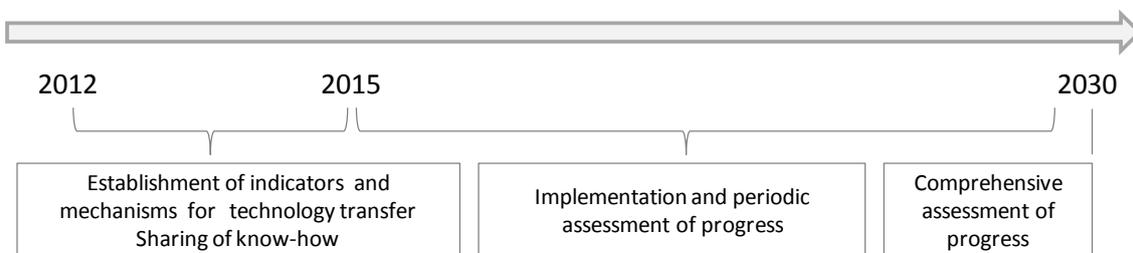


Figure 1 Goals and timeline of a green economy roadmap proposed by the Zero Draft

Proposals on finance, technology, capacity development and trade are enumerated in section C. In terms of finance, the fulfilment of all official development assistance commitments is reaffirmed, including the commitments by many developed countries to achieve the target of devoting 0.7 per cent of the Gross National Product (GNP) to Official Development Assistance (ODA) to developing countries by 2015² and a target of 0.15 to 0.20 per cent of GNP contributing to ODA for the least developed countries. General remarks are made regarding technology and capacity development, such as removal of obstacles to scaling up technology transfer and support for existing regional and sub-regional structures and mechanisms, with the aim of facilitating cooperation and the exchange of information. As for trade, support is expressed for the eventual phasing out of market-distorting and environmentally harmful subsidies with safeguards to protect vulnerable groups, and trade capacity building and facilitation activities by international and regional organisations are proposed to assist developing countries in identifying and seizing new export opportunities, including those created by the transition towards a green economy. Additionally, international economic and financial institutions must be established to ensure that developing countries are able to benefit from the advantages of the multilateral trade system and from their integration into global markets.

² The target of 0.7 per cent of Gross National Income (GNI), not GNP, is set in the OECD. The difference or similarity between these targets is not mentioned in the Zero Draft.

2. Views of the G20 Countries Regarding the Green Economy

In this chapter, the views of the G20 (Group of Twenty) countries regarding the green economy will be reviewed. Table 1 shows the composite countries of the G20 and their records of statements and document submissions during the Rio+20 process.

Table 1 Statements and submissions of documents by G20 countries in the Rio+20 process

	Country	A	B	C	D	E
2.1	 Argentina	√	√	√	NA	√
2.2	 Australia	√	√	√	√	√
2.3	 Brazil	√	√	√	√	√
2.4	 Canada	NA	√	√	√	√
2.5	 China	√		√	√	√
2.6	 European Union	√	√	√	√	√
2.7	 France	NA	√	√	NA	NA
2.8	 Germany	NA	√	√	√	NA
2.9	 India	√	√	√	√	√
2.10	 Indonesia	√	√	√	NA	√
2.11	 Italy	NA	√	NA	√	NA
2.12	 Japan	√	√	√	√	√
2.13	 Mexico	√	√	√	√	√
2.14	 Republic of Korea	√	√	√	√	√
2.15	 Russian Federation	√	NA	√	NA	√
2.16	 Saudi Arabia	NA	NA	NA	√	NA
2.17	 South Africa	NA	NA	NA	√	√
2.18	 Turkey	NA	NA	NA	NA	√
2.19	 United Kingdom	NA	√	NA	NA	√
2.20	 United States of America	√	√	√	√	√

A: First Preparatory Committee Meeting

B: Responses to the Questionnaire

C: First Intersessional Meeting

D: Second Preparatory Committee Meeting

E: Input for Compilation Document

2.1. Argentina

To help developing countries to move towards green economies, Argentina stresses that green economies should not lead to trade barriers and aid conditionalities. Rather, green economies should promote financial assistance and technology transfer from developed to developing countries and address trade measures that are harmful to the environment and hamper sustainable development. Argentina states that the use of a single indicator to measure sustainable development is not preferable and that more suitable indicators should be developed within the national framework.

Argentina argued in the First Preparatory Committee Meeting that the green economy should take into account the difficult conditions in developing countries and avoid green protectionism. Argentina also noted that the green economy should be developed based on scientific evidence in a transparent and inclusive manner.

In the Responses to the Questionnaire, following its stated opposition to solely environmentally centred approaches, Argentina stresses that a green economy should consider the responsibilities of developed countries based on the principle of CBDR. Along this line, it is argued that green economies in developing countries can develop through a framework of voluntary actions if they are adequately supported by technology transfer and financial assistance from developed countries. Argentina also notes trade issues, arguing that green economy policies should not encourage green protectionism; rather, they should address trade measures that are harmful to the environment and to sustainable development.

Argentina introduced its National Sustainable Development Indicators, reflecting all dimensions of economic, social and environmental factors, in the First Intersessional Meeting and emphasised that such an effort should be made within each national framework. Simultaneously, Argentina represented its perception that the use of a single indicator, e.g., carbon footprint, is not preferable to measuring sustainability in a more complex manner due to the potential negative effects of a single indicator, e.g., negative impacts of trade restrictions on fairness.

In the Input for Compilation Document, Argentina argues that a green economy should not replace sustainable development; rather, the former should be regarded as a tool to achieve the latter, and a green economy should retain sufficient flexibility to adapt to different levels of development and national priorities. Argentina raises major concerns that the transition to a green economy will cost too much for developing countries to afford and may have negative implications in terms of competitiveness, market access and poverty reduction. Furthermore, Argentina underlines that a

green economy should not lead to green protectionism, such as trade barriers and assistance conditionality; rather, it should encourage financial assistance and technology transfer from developed to developing countries and should address trade measures that are harmful to the environment. In this context, Argentina reiterates the commitment of developed countries to the ODA target of 0.7 per cent of GNI by 2015.

2.2. Australia

Australia first expressed interest in a blue economy at the stage of Input for Compilation Document, proposing the development of a framework for actions aimed at establishing a blue economy. Australia continually notes the value of natural capital and progress of measures for sustainable development, thereby showing high willingness to develop measures for internalising externalities. Its suggestion that a commitment to increase ODA is needed is backed by a national plan for doubling ODA.

In the First Preparatory Committee Meeting, Australia stated that the most important factor in green economy is action. Australia also emphasised that a green economy would involve good governance, recognition of the value of natural resources, and flexible responses to each national situation. In addition, Australia listed key challenges for moving towards a green economy, such as enhancing communication mechanisms, considering social aspects of sustainable development, promoting understanding at the community level, and coordinating with other relevant activities.

Based on the recognition of current failures to account for negative externalities appropriately and to understand environmental degradation from the perspective of reduced consumption opportunities, Australia expresses its understanding in the Responses to the Questionnaire that a green economy implies that growth strategies should internalise environmental externalities. Australia also presents its viewpoint that a green economy can be a powerful tool to encourage domestic sustainability and to promote international cooperation in the context of resource efficiency and technology transfer. Australia argues that its plan should be flexible enough to be adopted under different national circumstances and priorities.

In the First Intersessional Meeting, Australia showed its support for recognition of a green economy approach as a vehicle to promote integration across three pillars of sustainable development. Australia also emphasised the need for broader measures of progress and success for practical implementation of a green economy. In the subsequent Second Preparatory Committee Meeting, furthering its arguments, Australia stated that a critical aspect of Rio+20 will be the recognition that

a green economy is most powerful when it acts as a vehicle to promote integration across the three pillars of sustainable development. Identification of broader measures of progress will be a key for better integration. In its argument, Australia underlined the importance of enhancing efforts for the valuation of natural capital and ecosystem services.

Using the term “blue economy”, Australia argues in the Input for Compilation Document that sustainable ocean and marine conservation and management are urgent priorities. A framework for action towards achieving a blue economy will be required at Rio+20, although there are no “one-size-fits-all” actions. Australia also suggests including the development of SDGs and support for the System of Environmental Economic Accounting (SEEA) in the Rio+20 outcomes as drivers of international efforts and measures of progress toward sustainable development. Touching upon the financial issues of sustainable development and introducing a national plan for doubling ODA, Australia demonstrates its recognition of the need for commitment to increase ODA and support to mobilise private financing at the Rio+20. In addition to issues specific to the ocean, food security, water use efficiency, biodiversity conservation, desertification, sustainable energy, sustainable mining practices and climate change are raised as priority areas.

2.3. Brazil

Brazil frequently mentions the definition of the green economy and underlines the importance of fostering common understanding in the Rio+20. Noting social dimensions of the green economy, it emphasises the concept of an inclusive green economy in its Input for Compilation Document. Brazil also argues that a green economy should be flexible to national socio-economic conditions and that financial assistance and technology transfer from developed to developing countries will be required for its implementation. Brazil lays out an ambitious goal that SDGs could be created at the Rio+20 after negotiating the strategic issues during the preparatory process.

In the First Preparatory Committee Meeting, Brazil expressed doubt rooted in the lack of a universally accepted definition of a green economy, and the resulting discussion will be useful for promoting a common understanding of green economies. Brazil also stressed that translating the concept of a green economy into nationally appropriate measures would be a complex challenge because of a lack of universally applicable solutions. In Brazil’s opinion, financial assistance and technology transfer are two essential elements for establishing a green economy, so support from developed to developing countries should be enhanced based on the principle of CBDR.

Brazil notes in the Responses to the Questionnaire that the Rio+20 would be a good opportunity for

reaching a common understanding and discussing policy implications of green economies under the current situation where there is no clear and consensual definition. Flexibility to each nation's socio-economic conditions is required to achieve a green economy, and thus generic indicators on the greening of an economy will be ineffective. Similar to the First Preparatory Committee Meeting, when Brazil stated that adopting green economy practices in every country would require additional funding, Brazil underlines the importance of discussing finance mobilisation and technology transfer.

Noting the theme of the green economy itself, Brazil reiterated the importance of the context of sustainable development and poverty eradication in the First Intersessional Meeting. Brazil also commented that policy costs and the flexibility of a green economy to national policies must be considered. In the subsequent Second Preparatory Committee Meeting, Brazil mentioned that decisions made at the Rio+20 should be in line with the concepts of flexibility of a green economy and changes in unsustainable patterns of consumption and production following the lead of developed countries. It was also suggested that abusive subsidies and restrictive trade measures should be tackled in the Rio+20 based upon recognition of the green economy approach as a tool to reduce international inequality.

In the Input for Compilation Document, Brazil stressed that a green economy should be defined as a sustainable development program to ensure that it would not be interpreted as promoting commercialisation of advanced technologies over solutions to the challenges inherent in developing countries. Simultaneously, Brazil underlines the concept of an inclusive green economy that incorporates the lowest income groups with a view to integrating social dimensions into the discussion in the Rio+20. Brazil lays out an ambitious goal regarding SDGs for the Rio+20 Conference after negotiating the strategic issues during the preparatory process. Brazil's listed criteria are as follows: SDGs must not be expected to replace the MDGs, but rather, to complement them and bring them up to date; they must contain concrete objectives that are quantifiable and verifiable, with specified deadlines, and giving due consideration to national realities and priorities; and they should be universal in nature, targeting developed and developing countries in equal measure.

2.4. Canada

Canada consistently emphasises the importance of success stories and best practices in the effort to establish a green economy while introducing its own experiences. Canada has therefore proposed the creation of a green economy toolkit in the Rio+20. In response to the OECD's work on indicators,

Canada began to mention green economy indicators and to suggest the creation of a voluntary set of indicators in the Rio+20.

Canada's first statement is the Responses to the Questionnaire, where it introduces its national policies and views on international cooperation, additionally stating that it hopes to share success stories of each country at the Rio+20. Likewise, Canada made a welcome remark on sharing best practices at the First Intersessional Meeting and introduced its own experience in the implementation of strategies for environmental assessment and international cooperation on natural resource management. Again in the Second Preparatory Committee Meeting, Canada emphasised its focus on a toolkit providing a regulatory approach as an outcome of the Rio+20.

Based on the perception that elaboration of a green economy toolkit would be a useful contribution to the Rio+20, Canada enumerates best practices in the Input for Compilation Document, e.g., green accounting and strategic environmental assessment. Moreover, in support of the creation of a voluntary set of green economy indicators, Canada introduces a relevant work of its own referring to the green growth indicators established by the OECD.

2.5. China

China stresses the argument that promotion of technology transfer, financial assistance and expansion of market access to developed countries are essential for establishing green economies in developing countries. In addition, China expresses clear opposition to green protectionism and aid conditionality. Simultaneously, China presents its views on the importance of transition towards a green economy, suggesting that an international community should encourage the dissemination of best practices.

Representing its recognition that the idea of a green economy has become an important current trend, in the First Preparatory Committee Meeting, China emphasised its opposition to green protectionism and support of the importance of technology transfer, financial assistance and market access from developed to developing countries. In line with this argument, China additionally mentioned in the First Intersessional Meeting that a green economy is not a substitute for sustainable development as there is no uniform definition of a green economy; that a green economy should be regarded as a means to achieve sustainable development; and that there is no one-size-fits-all model of a green economy.

In the Second Preparatory Committee Meeting, China described its own efforts on and further

commitment to a green economy and stated that it is ready to work with international communities to exchange best practices. China also requested that developed countries share their successful experiences and support developing countries as they move towards establishing their own green economies.

In the Input for Compilation Document, China emphasises that the primary goal of a green economy is poverty eradication, which should serve as an important benchmark for the formulation and implementation of policies on the green economy. Aggregating previous comments and maintaining its opposition to green protectionism and aid conditionality, China requires developed countries to take the lead in improving unsustainable consumption and production, providing best practices, and helping developing countries by means of financial assistance, technology transfer, capacity building and expansion of market access. Meanwhile, it encourages developing countries to formulate and implement sustainable development strategies that are suited to their national conditions. China also argued that the international community should provide education and vocational training to reduce the social costs of the transition towards green economies in developing countries.

2.6. European Union (EU)

In its statements and documents, the EU frequently emphasises the flexibility of green economy policies in response to national circumstances and the importance of natural capital management through internalisation of externalities. At earlier stages of discussion, the EU enumerated three expected outcomes of the Rio+20: a global commitment to a green economy; a UN green economy roadmap; and a toolbox or best practice guide. In the current Input for Compilation Document, elaborating on this discussion, the EU proposes a green economy roadmap with deadlines for specific goals, objectives and actions at the international level and suggests the development of indicators complementing GDP and the creation of a toolbox or best practice guide.

First of all, in the First Preparatory Committee Meeting, the EU stressed that attention should be focused on instruments and actions necessary for transition towards a green economy. This approach is compatible with sustainable development, taking into consideration the varying contexts in developing countries, emerging economies and developed countries. In particular, the importance of setting prices appropriately was emphasised, and the importance of valuation of ecosystem services and compensation for negative externalities was mentioned. The EU also represented its perception that exchanging best practices can support the implementation of green economy strategies.

The EU argues in its Responses to the Questionnaire that a green economy needs to be promoted

jointly with the social dimension to have a positive social impact. From this aspect, a green economy should be understood as a set of tools and a roadmap to accelerate and facilitate a transition to an economy that is consistent with sustainable development. The EU also emphasises that approaches to the green economy should take into account differences in conditions between countries and therefore possess a certain degree of flexibility. At this stage, the EU enumerated three expected outcomes: a global commitment to and common understanding of the green economy; a UN green economy roadmap that includes a timeline, key actors, voluntary targets and a monitoring mechanism; and a toolbox or best practice guide of necessary actions, instruments and policies. Additionally, the EU mentions possible agreements on specific topics, such as green economy indicators and measurement of well-being. As additional inputs to the questionnaire, the EU lists examples of effective green economy policies and measures, including environmental fiscal reform, sustainable public procurement, environmental standards such as eco-labels, and eco-innovation.

In the First Intersessional Meeting in January 2012, the advantages of further discussion on the green economy in the Rio+20 were mentioned, and three expected outcomes similar to the above were listed: a global commitment to a green economy; a UN green economy roadmap; and a toolbox or best practice guide. The EU also addressed the issue of measuring sustainable development and noted the importance of reliable social and environmental statistics and indicators.

The EU mentioned the important features of the green economy in the subsequent Second Preparatory Committee Meeting. In particular, the EU argued that the green economy needs to emphasise the management of natural capital by means of internalising externality, that there is no one-size-fits-all model and that exchange of best practices and international cooperation are required. The EU again addressed its three expected outcomes of the Rio+20.

In the Input for Compilation Document, in addition to briefly addressing the importance of the open market and internalisation of externality in the green economy, the EU proposes the creation of a green economy roadmap with deadlines for specific goals, objectives and actions at the international level as an operational outcome of the Rio+20. The EU proposal listed the following cross-cutting actions to be included in this roadmap:

- Development of indicators to complement GDP, including headline indicators, in line with ongoing initiatives
- Establishment of a 10-Year Framework of Programmes on SCP
- Formulation of a capacity development scheme to provide country-specific advice and to assist interested countries in accessing available funds and compiling a toolbox or best practice guide

- Launch of an international process to promote the roles of innovative and private financial mechanisms
- Commitment to gradual elimination of harmful environmental subsidies

The EU also listed a number of sectoral issues requiring action: water; food and agriculture; sustainable energy; forestry; soil and sustainable land management; oceans; fisheries; biodiversity conservation; chemicals; sustainable management of materials and waste; and sustainable urban development.

2.7. France

As France takes a similar stance to the EU, it has fewer opportunities to make comments. France's major emphasis is on the importance of the social dimension and the development of indicators for measuring the green economy.

France's first statement is its Responses to the Questionnaire, where, prioritising the social dimension of the green economy, including employment, it introduces an action plan on green job creation and underlines the necessity of social solidarity for sustainable consumption and production. Similarly, in the First Intersessional Meeting, integration of social aspects into the green economy was raised as one of the challenges in the Rio+20. France also mentioned the importance of developing indicators and creating an international roadmap to make the green economy feasible and implementable.

2.8. Germany

At first, Germany stressed that it was too early to define effective steps for implementation because the concept of a green economy had not become established in most countries. To stay consistent with the opinion of the EU, however, Germany shifted its focus to a green economy roadmap and further proposed that the UN provide individual advice to countries transitioning to a green economy until 2020 and that the essential steps of green economy implementation be complete by 2030.

Germany's first statement is its Responses to the Questionnaire. Although Germany highlights the potential of its own green technologies, it states that it is too early to define effective steps for their implementation as the concept of a green economy is not yet established in most countries; therefore, establishment of good practices and appropriate communication could be a useful first step.

Similar to the EU, in the First Intersessional Meeting, Germany listed three expected outcomes of the Rio+20: global commitment to a green economy, a UN Green Economy Roadmap, and a toolbox or best practice guide. Germany further proposed that a green economy roadmap should include individual advice for each country from the UN until 2020 and that essential steps of implementation should be achieved by 2030. Likewise, in the subsequent Second Preparatory Committee Meeting, Germany argued for the necessity of a UN Green Economy Roadmap that includes a timeline, benchmarks, indicators, legal and economic instruments and voluntary targets to pave the way for a green economy. Further, Germany reiterated its call for individual advice for each country from the UN until 2020 and argued that essential steps of implementation should be achieved by 2030.

2.9. India

Based upon the dichotomy between developed and developing countries and CBDG, India stresses the responsibilities of developed countries and special treatment for developing countries in the forms of technology transfer and financial assistance. India also underlines the need for policy space for a green economy according to national circumstances, expressing a positive attitude towards national strategies and experience sharing while clearly disagreeing on defining quantitative targets that may bind national policies. However, India recognises the need for alternative indicators to measure true welfare improvement.

First of all, in the First Preparatory Committee Meeting, India represented its perception that a green economy should not be normative and enumerated important issues for the transition to a green economy, namely, achievement of sustainable livelihood at the individual and community levels, expansion of appropriate opportunities in consideration of national circumstances, and securing of equality between developing and developed countries.

India announces in its Responses to the Questionnaire that the green economy should be developed based on the principle of CBDR and should preserve ample flexibility and policy space to accommodate national circumstances and priorities. India also underlines the requirements for developing countries to move towards a green economy, namely, access to technologies and finances, prevention of green protectionism in trade and financial assistance. Citing its national experiences, India expresses its understanding that GDP is not the right measure of sustainable growth and notes the need for alternative indicators measuring true welfare improvement.

Similar views were expressed in the First Intersessional Meeting, where India additionally

emphasised the necessity of defining a green economy and raised questions about measures preventing green protectionism. In the subsequent Second Preparatory Committee Meeting, based upon its understanding that the concept of green economy is gradually becoming clearer, India touched upon matters similar to those it raise previously and stated that the green economy should provide guidance towards sustainability and voluntary programs of actions.

India argues in the Input for Compilation Document that poverty eradication should be an overriding goal of a green economy and that special and differential treatment should be provided for developing countries based on the principle of common but differentiated responsibilities. Simultaneously, India demands that developed countries prevent green protectionism, reduce agricultural subsidies, and promote technology transfer and financial assistance and proposes the creation of a Sustainable Development Fund. India shows its support for country-specific strategies based on national circumstances and priorities and for ample flexibility and policy space to make its own choices from a broad menu of options. However, India clearly opposes defining quantitative targets, arguing that developed countries should take the lead in setting SDGs.

2.10. Indonesia

Raising concerns about resource efficiency and sustainable consumption and production, Indonesia mainly objects to green protectionism and aid conditionality and underlines the importance of technology transfer and financial assistance to developing countries.

In the First Preparatory Committee Meeting, Indonesia highlighted the importance of policy space in each nation and of international support for the transition towards a green economy in the field of finance and trade. Indonesia also mentioned green protectionism and the necessity of financial assistance and technology transfer to developing countries.

Indonesia made the following suggestions in the First Intersessional Meeting: that one single definition of a green economy may be insufficient when national circumstances and priorities are considered; that further analysis on the costs and benefits of a green economy should be performed; and that access to low-carbon technologies and provision of funding from developed to developing countries should be further promoted based on the principle of CBDR.

In the Input for Compilation Document, Indonesia acknowledges that a green economy is a development paradigm that hinges upon resource efficiency, which will eventually lead to more sustainable consumption and production, and that its implementation should be promoted by

mainstreaming the concept of the green economy in national development planning. Although Indonesia opposes green protectionism and new aid conditionality, it reiterates the importance of financial assistance and technology transfer.

2.11. Italy

Italy's participation in the discussion has been limited, and it seems to have similar opinions to the EU.

In fact, Italy does not provide a specific document of Responses to the Questionnaire; it merely occasionally indicates 'See answers of the EU'. Italy made a statement in the Second Preparatory Committee Meeting similar to the EU's, arguing that the green economy should be perceived as a driving force to achieve sustainable development and that concrete and operative measures such as a green economy roadmap should be established at Rio+20.

2.12. Japan

Japan is a proactive participant in the discussion on indicators, suggesting consideration of happiness and well-being based on economic and social conditions, physical and mental health, and social relationships. Japan proposes the following additional outcomes of Rio+20: the formulation of a new development strategy for the 21st century; the launch of a formal process towards the adoption of the post-MDGs; and development of a national green economy strategy utilising the policy toolbox.

Japan stated in the First Preparatory Committee Meeting that discussion at the Rio+20 should be output oriented and based on the existing frameworks and should avoid devoting too much time to debating the precise definition of a green economy. Additionally, Japan noted its involvement in financial assistance and technology transfer in the field of low-carbon technology. In addition to its responses to the Questionnaire, Japan introduces its own experiences and policies in its Responses and demonstrates its expectation to agree on the importance of the green economy as an expected outcome of the Rio+20.

Together with describing its own experiences and policies, Japan again stressed in the First Intersessional Meeting that discussing the definition of a green economy should not consume too much time. It also highlighted the importance of considering appropriate indicators for the green economy because GDP is not always an accurate indicator of quality of life (QOL). In the

subsequent Second Preparatory Committee Meeting, besides introducing its own experiences and policies, Japan emphasised the importance of appropriate indicators for assessing a green economy and described four leading indicators: QOL, greenhouse gas (GHG) intensity, resource intensity, and biodiversity conservation.

Japan presents its proposal in the Input for Compilation Document. After noting its understanding of the green economy concept and stressing that the green economy is the most important tool to realise sustainable development, Japan proposes that the international community agree on the formulation of a green economy strategy that corresponds with individual countries' respective stages of development and that the policy toolbox, including green innovation, should be used to formulate this strategy. Japan argues that the principle of CBDR is not intended to divide the international community into developed and developing countries; more focus should be placed on the roles and responsibilities of emerging economies and private sectors, considering the current international environment. Japan also suggests the following three possible outcomes of the Rio+20:

- A new international development strategy for the 21st century should be formulated with human security as its guiding principle. This strategy is needed for setting concrete post-MDG targets.
- A formal process culminating in the adoption of the post-MDG targets should be launched. SDGs may be interpreted in various ways, but eventually they need to converge into the post-MDGs, therefore, Japan does not use the term "SDGs".
- Work to establish indicators other than GDP should be promoted. Such indicators can be a basis of post-MDGs; for example, happiness/well-being could be a meaningful indicator with a basis in economic and social conditions, physical and mental health, and social relationships.

In addition, Japan makes several proposals in the areas of disaster risk reduction, energy, food security, water, future city, education for sustainable development, Global Earth Observation System or Systems, technological innovation, and biodiversity.

2.13. Mexico

Mexico emphasises the policy space of each nation according to its condition and capability, thereby stressing that indicators and goals should be considered. Mexico stresses the importance of technology transfer and proposes the creation of regional centres of expertise.

Mexico argued in the First Preparatory Committee Meeting that the green economy should be

defined by the international community and that each nation should determine what policies and measures can be incorporated into its national development strategies. The importance of technical cooperation, exchange of experiences and technology transfer from developed to developing countries was also highlighted.

Although Mexico only introduces its own policies and activities relevant to green labelling and sustainable consumption and production in the Responses to the Questionnaire, it argued in the First Intersessional Meeting in January 2011 that we need not persist in detailed discussions to define the green economy sector by sector because the green economy is a principle of actions. However, Mexico argues, we should be cautious to avoid abuse of the green economy for economic activities that are not genuinely green. In the Second Preparatory Committee Meeting, Mexico stated that the fundamental tools for establishing a green economy are technologies and infrastructures that can serve as incentives for research and development and as viable mechanisms to facilitate access and use in developing countries.

Mexico emphasises the importance of economic valuation of environmental services in the Input for Compilation Document and states that it is important to agree on the framework for building capacity for such an assessment at the Rio+20. Showing opposition to green protectionism, Mexico proposes the creation of regional centres of expertise for promoting technology transfer while respecting intellectual property rights. Moreover, Mexico argues that indicators and goals should be considered as options subject to national conditions and capabilities.

2.14. Republic of Korea

The Republic of Korea is consistently proactive in its promotion of the green economy. While highlighting its own activities, it proposes ambitious targets, such as the creation of a global roadmap and the establishment of a Global Green Growth Partnership at the Rio+20. In this context, the Republic of Korea encourages each country to prepare a National Green Economy Strategy and shows its preparedness to support developing countries in doing so.

First of all, in the First Preparatory Committee Meeting, the Republic of Korea argued that the creation of and internationally cooperative actions towards a global roadmap will be required to enable the global transition to a green economy. In mentioning job creation by the green economy in response to the statement by the Russian Federation, the contribution of a green economy to social development was also emphasised.

The Republic of Korea emphasises its own proactive actions toward a green economy in the Responses to the Questionnaire, e.g., formulation of a Five-Year Plan for Green Growth and large-scale investment in green technologies, stating that a political document stipulating the definition of a green economy and the objectives that must be met to realise the paradigm shift should be created at the Rio+20.

The Republic of Korea argued in the First Intersessional Meeting that a green economy should be flexible to maintain policy space for national circumstances and that sharing of best practices and experiences will be important for its implementation. The founding of the Global Green Growth Institute (GGGI) for the purpose of disseminating the green economy model into other countries was also described. The Republic of Korea underlined the importance of environmental tax and private funding in the green economy in the Second Preparatory Committee Meeting. While touching upon the lack of capacities in developing countries, it committed to assisting these countries by providing funding and relevant facilities.

In the Input for Compilation Document, with its statement that the international efforts for creating a green economy should focus more on practical embodiment than on the concept in abstract terms, the Republic of Korea stresses that each country could build its own concrete national strategies for a green economy. Meanwhile, it identifies four essential elements of a green economy, namely, a green market, green security, green equity and green lifestyle.

The Republic of Korea argues that the outcome document of the Rio+20 should contain particular provisions that form the basis for assistance to Member States to advance the green economy. In addition, the document should provide a global roadmap for the green economy and concrete and action-oriented programs and action plans that could apply to both international communities and individual countries. Its further suggestions for a global roadmap are as follows:

- SDGs that reflect global environmental issues and include specific goals for growth should be established.
- Green Indicators to measure progress towards a green economy should be identified to provide a basis for comparison, evaluation and feedback.
- A National Green Economy Strategy identifying measures for green investment and innovation and major areas for promotion should be prepared and submitted, taking into account the economic development and particular conditions of each country.
- A centre for aggregating and analysing information related to the green economy should be created as a global and regional knowledge-sharing platform.

- A green network for capacity building should be established.
- Building towards Rio+30 in 2022, a timetable for the ten years following the Rio+20 is proposed as follows:
 - ✓ 2012-2014: establishment of green indicators to evaluate green economy implementation, including data platforms, protocols for transparency and information dissemination, and basic mechanisms for the sharing of innovation and technology
 - ✓ 2013-2015: establishment of National Green Economy Strategies
 - ✓ 2016-2020: implementation and assessment of progress in implementing strategies linked with the post-Kyoto framework and subsequent carbon reduction measures
 - ✓ 2021-2022: comprehensive assessment of progress towards a green economy
 - ✓ 2022-: new strategy for the Rio+30

Moreover, the Republic of Korea proposes the establishment of a Global Green Growth Partnership with a view to providing assistance for developing countries to formulate a green economy strategy and implement pilot projects. It argues that greening of ODA and incentives to encourage private investment and participation in green sectors are needed.

2.15. Russian Federation

After acknowledging that no common definition of a green economy exists, the Russian Federation expresses its view that a green economy should be developed while considering each nation's specific characteristics. Touching upon the negative aspects of a green economy, the Russian Federation also emphasises the necessity of risk assessment. In the context of sustainable development, the Russian Federation shows its positive attitudes through its expectation that proposals on long-term development goals and new indicators will emerge from the Rio+20.

In the First Preparatory Committee Meeting, after mentioning that there is no clear understanding of green economy at this stage, the Russian Federation showed its interests in a wide range of issues relevant to a green economy, such as social considerations, job creation, financial arrangements and trade protectionism. The Russian Federation noted in the First Intersessional Meeting the necessity of a common understanding of the green economy concept and consideration for negative aspects thereof. Simultaneously, establishment of working groups for producing substantive outcomes at the Rio+20 was proposed.

These views are reflected in the Input for Compilation Document. Noting again that no common definition of a green economy exists, the Russian Federation expresses its view that a green

economy should be developed while considering each nation's specific characteristics and suggests examples of green economies in developed countries, emerging economies and developing countries. It also highlights the necessity of evaluating the risks associated with a green economy, facilitation of the open market rather than protectionism, promotion of financial assistance and investments to developing countries and creation of a platform to study best practices. The Russian Federation stresses that a proposal for long-term development goals for 2030/2050 and new indicators to measure sustainable development in an integrated manner should be among the outcomes of the Rio+20.

2.16. Saudi Arabia

Although Saudi Arabia expressed its opinion only once, its scepticism regarding the green economy concept is of interest.

Saudi Arabia made a statement only in the Second Preparatory Committee Meeting, when it stated that it is not possible to endorse a green economy approach in light of questions about the intention of introducing this idea and about the functions of tools for sustainable development.

2.17. South Africa

South Africa emphasises the development of a green economy as per national circumstances, opposition to green protectionism, and technological and financial assistance to developing countries. South Africa also underlines the necessity of a clear definition of a green economy to avoid its misuse and suggests one example.

In its first statement in the Responses to the Questionnaire, South Africa highlights the following issues: a green economy should consider national circumstances; it should not support trade protectionism; developed countries should take the lead in the shift towards sustainable consumption and production based on the principle of CBDR; and discussion on a green economy should take into account financing, trade, technology and investment. Similar to the above, South Africa stated in the Second Preparatory Committee in March 2011 that countries should be allowed to make their own decisions on their growth path based on principle 2 of the Rio Declaration; countries should oppose protectionism, conditionality and standards; and science and technology capabilities, stronger institutional capacities and promotion of partnership will be necessary in developing countries.

Based on the idea that we should identify the key elements and features of a green economy, thereby

clarifying the primary objective to avoid misuse of the concept, South Africa proposes a definition, overall objective and vision of a green economy in the Input for Compilation Document. Based on principle 7 of the Rio Declaration regarding CBDR, it stresses that all nations should be allowed a policy space to define their own strategies to facilitate a transition to a green economy as per their respective national priorities and stages of development. South Africa additionally argues that assistance for developing countries is needed and that an inclusive green economy will be required to address poverty while securing natural resource bases.

2.18. Turkey

Turkey breaks its silence in its Input for Compilation Document, showing positive attitudes towards a green economy roadmap and proposing mechanisms for facilitating financial assistance and technology transfer to developing countries. It also emphasises the creation of SDGs and indicators to measure sustainable development as important outcomes of the Rio+20.

Stating that a common understanding of the green economy is needed, Turkey mentions the possibility of creating a green economy roadmap that considers CBDR at the Rio+20. Additionally, it stresses the need for a mechanism facilitating access to technology and finance and capacity building in developing countries and proposes establishment of a Global Green Development Fund and a Green Technology and Innovation Mechanism. In the context of sustainable development, Turkey argues that it is important to formulate SDGs, which would determine specific objectives and concrete actions to be taken by all countries, and to develop indicators to measure sustainable development in conjunction with the SDGs as part of the outcome document.

2.19. United Kingdom (UK)

The UK has been involved in the Rio+20 process only through submission of relevant documents. In these documents, it does not make any special proposals, instead describing its relevant activities, such as creating a green economy roadmap and developing Sustainable Development Indicators.

The UK introduced its political commitment to the creation of a green economy roadmap and to becoming ‘the greenest government ever’ in its Responses to the Questionnaire. Likewise, in the Input for Compilation Document in November 2011, the UK declared that its submission is intended to be complementary to the contribution by the EU and its Member States, which the UK fully supports. In it, the UK introduces its own activities, such as revision of the Sustainable Development Indicators and launching of the Measuring National Well-being Programme.

2.20. United States of America (USA)

While introducing its own green economy policies, the USA stresses that the most effective way to promote a green economy internationally will be to develop a toolkit or a range of policy options as a green economy reflects national priorities and circumstances. The USA's policies also show a partial understanding of SDGs.

The USA demonstrated its basic position in the First Preparatory Meeting by indicating its recognition that implementation measures for a green economy vary from country to country and introducing its own green economy activities as best practices. Subsequently, in the Responses to the Questionnaire, the USA introduces policies relevant to a green economy and represents its perception that independent initiatives can contribute to the overarching goal of a national green economy strategy. The USA also describes its expectations for outcomes of the Rio+20, namely, transfer of best practices, creation of guidance on how to implement green economy initiatives successfully, and identification of areas for global cooperation.

Touching upon the Green New Deal policies, the USA expressed its view that both short-term and long-term perspectives should be considered in the green economy in the First Intersessional Meeting in January 2011. The USA emphasised the social dimension of the green economy and presented opinions about the roles of women, youth and education systems in the Second Preparatory Committee Meeting. Recognising that a green economy should reflect each nation's priorities and circumstances, the USA argues that the most effective way to promote a green economy internationally is to present a toolkit or a range of policy options.

The USA makes independent comments on specific sectors, such as energy, urbanisation, water systems, manufacturing, food security, oceans and ecosystem services, in the Input for Compilation Document. The USA presents its view of properly structured SDGS as a potentially useful means to assess progress and catalyse actions.

3. Key Issues on the Green Economy at Rio+20

In light of the arguments summarised in Chapters one and two, this chapter considers likely major contentions regarding the green economy concept at Rio+20. Key issues will be categorised under three titles, namely, ‘principles of a green economy’, ‘policy tools for transition towards a green economy’ and ‘international cooperation for a green economy’.

3.1. Principles of a Green Economy

Prior to discussion on the principles of a green economy, it is important to define what a green economy is. Its definition has been mentioned frequently during the Rio+20 process meetings, although it is not addressed in the Zero Draft. Japan, Mexico and the Republic of Korea express their views that concrete measures should be discussed rather than devoting time to this argument; meanwhile, Brazil and South Africa argue that common understanding of the key elements and features of a green economy will be required. On the contrary, China and the Russian Federation take the stance that no common definition of a green economy exists. From a different perspective, Australia and small island nations propose the notion of a blue economy, underlining the importance of marine ecosystems. Notably, Australia describes its expectations for outcomes regarding a blue economy, stating that a framework for action towards a blue economy should be developed at Rio+20. Brazil, France and South Africa highlight the social dimensions of a green economy, and Brazil suggests the concept of an inclusive green economy that would promote incorporation of the lowest income groups. As such, each country has a different definition of a green economy. Moreover, the definitions set by United Nations Environment Programme (UNEP) and the Organisation for Economic Cooperation and Development (OECD) in their own reports contain some differences (UNEP, 2011; OECD, 2011). All of these clues indicate the great challenges necessary to establish a single common definition of a green economy.

Many countries, including Argentina, Australia, China and Japan, share an understanding of a green economy as a means to achieve sustainable development, which is clearly mentioned in the Zero Draft. Similarly, the opinion that each nation can develop a green economy compatible with its development levels and priorities is supported by Argentina, Australia, Brazil, China, the EU, India, Indonesia, Mexico, the Russian Federation and South Africa. These points will be surely reflected in the outcome document. However, there does not seem to be a definition of a green economy that is in line with these widely held views. This is because nations share recognition of a green economy

as a vehicle and an understanding that each country's green economy will differ. Although most countries express positive perceptions of the green economy concept, note that some countries exhibit sceptical attitudes. For instance, Saudi Arabia stated that it is not possible to endorse a green economy approach in light of questions about the intention of introducing this idea.

Along with the understanding that a green economy should reflect each nation's circumstances and priorities, some countries argue that it should be based on the CBDR. The statements of Argentina, Brazil, Indonesia and South Africa exemplify this argument, stressing that developed countries should take the lead to realise sustainable consumption and production and to promote technology transfer and financial assistance to developing countries. Likewise, India underlines the necessity of special and differential treatment for developing countries, and Turkey argues that the principle of CBDR should be incorporated into a green economy roadmap. In contrast, Japan stresses that the principle of CBDR does not intend to divide the international community into developed and developing countries; instead, focus should be put on the roles and responsibilities of emerging economies and private sectors while considering the current international environment. The relevant passage in the Zero Draft only says that a green economy 'should be based on the Rio principles, in particular the principle of common but differentiated responsibilities'; it does not mention any actions of developed countries in this context. As indicated above, it is mainly emerging economies and developing countries that highlight the principle of CBDR: developed countries, except Japan, have not yet expressed their views on this question. Each country's responses to the Zero Draft will be of interest.

Apart from CBDR, the Zero Draft mentions the necessity of assistance from international societies to developing countries. In the Rio+20 process to date, emerging economies and developing countries, such as Argentina, Brazil, China, India, Indonesia, the Russian Federation, South Africa and Turkey, have played a major role in highlighting this issue. Simultaneously, some OECD countries, including Australia, the Republic of Korea and Mexico, also refer to assistance to developing countries. In particular, the Republic of Korea demonstrates proactive attitudes, committing to provide finances and relevant facilities to developing countries. Countries such as Argentina, China, India, Indonesia, the Russian Federation and South Africa also caution against and call for prevention of trade barriers, green protectionism and new aid conditionalities, although they do not propose concrete preventive measures. Countries may not share a common understanding of green protectionism due to insufficient discussion, although prevention of protectionism can be accepted as a principle in the light of the current free trade system.

3.2. Policy Tools for Transition towards Green Economies

The Zero Draft proposes an international knowledge-sharing platform as a policy tool for promoting the transition towards a green economy³. Four concrete measures are positioned under this platform, namely, a menu of policy options, a toolbox of good practices⁴, a set of indicators to measure progress, and a directory of technical and financial assistance. The menu of policy options, which is mentioned by India and the USA in their statements, seems to have similar features to the toolbox of good practices. As a number of countries mention this toolbox and a set of indicators to measure progress, the implications of which are unambiguous. Meanwhile, no countries included in this report refer explicitly to a directory of technical and financial assistance, making the content of this measure unclear. For these reasons, a toolbox of good practices and a set of indicators to measure progress will be targeted for analysis herein.

A toolbox of good practices is intended to accumulate good practices and to support each country in applying these practices domestically. The importance of sharing good practices is noted by China, Japan, the Republic of Korea and the Russian Federation in addition to Canada, the EU and the USA, indicating strong international need for a toolbox. This will be one of the most accepted policy tools for promoting the transition towards a green economy as it will enable each country to describe its own national experiences and technologies to other countries while imposing a relatively small burden (i.e., only information sharing) on governments. In a slightly different context, but concerning the same aspect of agreeability, a national green economy strategy proposed by Japan and the Republic of Korea will also be an important policy tool. This is because such a national strategy satisfies the principle of a green economy as per national circumstances and priorities and will not constrain each national policy space. In fact, China and India also show positive attitudes towards the formulation of national green economy strategies.

On the contrary, active debate is expected on a set of progress indicators by which each national policy will be evaluated according to international values and standards. As a matter of fact, the discussion on the ‘green growth indicators’ finalised by the OECD in May 2011 has become complicated, resulted in the elimination of headline indicators that were planned to be included. The review of countries’ opinions on the Rio+20 process demonstrates a wide variety of views on these indicators. Canada and the Republic of Korea clearly mention green economy indicators; the former

³ The term “knowledge-sharing platform” is the same as the one the Republic of Korea proposes. The intention of the Republic of Korea is to establish a centre for aggregating and analysing information related to the green economy.

⁴ The source of this term is unclear, but it seems to combine several terms, such as “toolkit”, proposed by Canada and USA, and “policy toolbox or best practice guide”, suggested by the EU.

proposes that each country create a voluntary set of indicators, and the latter suggests placing the indicators within a roadmap for green economy to provide a basis for comparison, evaluation and feedback on progress. In a broader framework than the green economy, some countries, including Australia, the Russian Federation and Turkey, emphasise measurement of progress for sustainable development. More concretely, the EU proposes the development of indicators complementing GDP, including headline indicators, and Japan suggests happiness/well-being based on economic and social conditions, physical and mental health, and social relationships. Argentina and Brazil express concerns about these arguments; the former stresses that the use of a single indicator is not preferable for measuring progress toward sustainable development, and the latter argues that generic indicators on the greening of the economy would be ineffective. More concrete discussion is required regarding, e.g., whether green economy indicators should be created, and if so, what elements should be included.

The green economy roadmap indicated in the Zero Draft suggests that the development of a set of indicators is targeted to be completed by 2015 and is to be used for measuring progress until 2030. However, it is mainly developed countries that mention a green economy roadmap, and furthermore, their opinions have different emphases (see Figure 2). The EU makes a general proposal that a roadmap should contain deadlines for specific goals, objectives and actions at the international level, which is complemented by Germany's suggestion of individualised advice from the UN for each country until 2020 and achievement of the essential steps of implementation by 2030. More

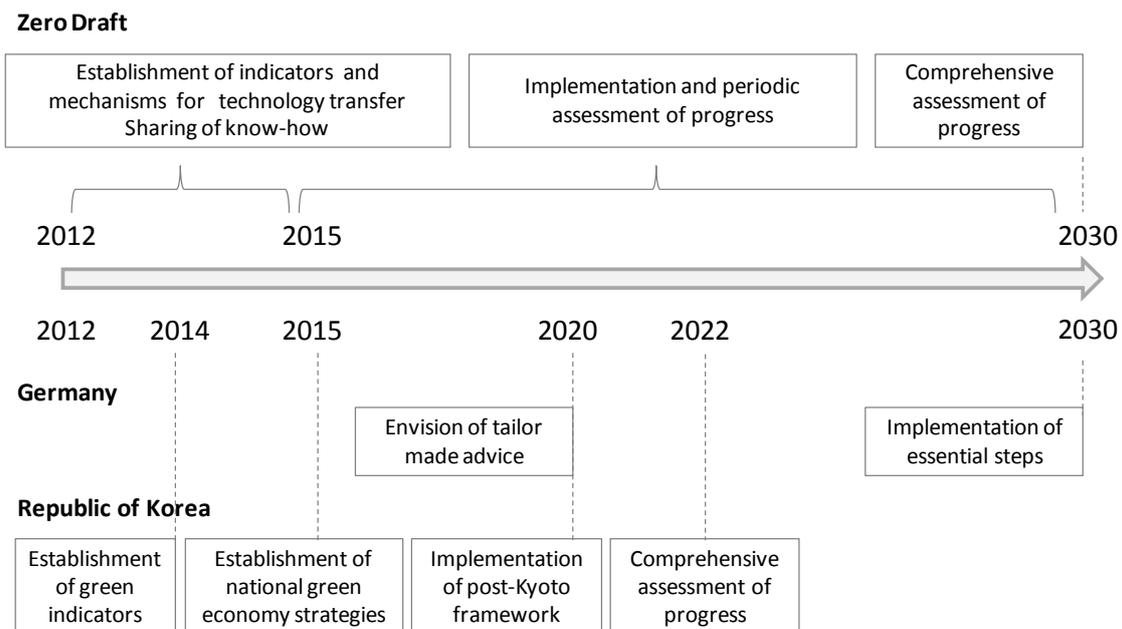


Figure 2 Goal and timeline of a green economy roadmap proposed by several countries

concretely, the Republic of Korea proposes a timeline for ten years after the Rio+20 as follows: establishment of green indicators up to 2014, establishment of National Green Economy Strategies up to 2015, implementation and assessment of progress of a post-Kyoto framework up to 2020, and comprehensive assessment of progress until 2022. Proposals for a green economy roadmap vary widely even among the proposing countries as shown; needless to say, inclusion of views and opinions from emerging economies and developing countries will further expand the scope of discussion. Further discussion will be required to achieve agreement on a concrete form for a green economy roadmap, which many countries named as one of the major outcomes of the green economy discussion at Rio+20.

What goals should we have for these green economy indicators and green economy roadmap? The Zero Draft does not indicate clear green economy goals. Meanwhile, concerns about SDGs have increased since 2011, resulting in the Zero Draft's proposal to launch a process to devise them by 2015. Although this is a relatively new proposal made by Latin American countries, a number of countries commented on SDGs. For instance, the Republic of Korea supports the creation of SDGs in the context of a green economy roadmap. Brazil describes an ambitious goal to create the SDGs at the Rio+20 based on the negotiations during the preparatory process and abiding by criteria described earlier. Australia and Turkey also argue that SDGs should be contained in the outcome documents and that indicators to measure sustainable development should be devised. The USA represents its perception that SDGs could be a useful means to assess progress and catalyse actions if structured correctly. The Russian Federation expects long-term development goals for 2030/2050 to be among the Rio+20 outcomes but fails to mention SDGs, while Japan deliberately avoids the term "SDGs" and highlights a new international development strategy for the 21st century guided by human security and a formal process towards the adoption of the post-MDGs. In contrast, India clearly opposes defining quantitative targets, arguing that developed countries should take the lead in setting SDGs. By and large, agreement to launch a process to devise SDGs by 2015 will be a goal at Rio+20, as written in the Zero Draft, although concrete structures and elements have not yet been discussed.

We now return to the question of whether SDGs can be interpreted as green economy goals. As stated above, the green economy is recognised as a means to achieve sustainable development, not to replace it, implying that SDGs are too large for a green economy. If green economy indicators and a green economy roadmap are created, green economy goals will be needed. A comprehensive discussion will be one way to combine relevant arguments into a roadmap and accompanying goals

and indicators⁵.

3.3. International Cooperation for Green Economies

As stated in section 1.1., international cooperation for technology transfer, financial assistance and capacity building for global transition towards a green economy are important issues.

The Zero Draft mentions that the loud voices calling for technology transfer from developed countries come mainly from emerging economies and developing countries. However, the creation of centres of excellence for green technology is the only proposal for promoting technology transfer, and this proposal lacks concrete mechanisms. Mexico proposes the creation of regional centres of excellence and Turkey suggests a green technology and innovation mechanism, both without indicating concrete mechanisms. Questions remain about the functions and authorities of such centres of excellence; e.g., do they collect green technologies from developed countries and disseminate them into developing countries by covering royalties for intellectual property rights, or do they invent green technologies by themselves and provide them to interested countries without retaining intellectual property rights? In general, technological development is highly involved in corporate activities and generates competition and conflict between countries. This is why the agreement on intellectual property rights was reached in the World Trade Organisation (WTO) after repeated discussions. It will be difficult to engage in serious discussion on this issue at the Rio+20. It may be possible to reach a general agreement at the Rio+20 on the gradual elimination of subsidies that have negative effects on the environment, as strongly emphasised by Argentina, Brazil and the EU, but concrete timelines and standards will be discussed on other occasions, such as WTO roundtables.

Many countries emphasise further financial assistance from developed countries as a way to promote development of a green economy in developing countries. In this regard, the EU highlights the launch of an international process to promote the role of innovative and private financial mechanisms, reflected in the Zero Draft as a plan ‘to launch an international process to promote the role of innovative financial mechanisms’. On the contrary, proposals for establishment of new international funds, such as the Sustainable Development Fund proposed by India and the Global Green Development Fund suggested by Turkey, are not specifically mentioned in the Zero Draft, possibly due to their unclear financial sources, and are instead aggregated into the ambiguous phrase

⁵ In the context of climate change, this will be expressed as “what level of emission targets, based on what indicators (e.g., total emissions and emissions per unit GDP), will be achieved by when?”

of ‘new, additional and scaled-up sources of financing to developing countries’. If provision of finances to developing countries stands for ODA, such a discussion will be merged into reaffirmation of the commitment by developed countries to allocate 0.7 per cent of GNI to ODA. Australia demonstrates positive attitudes regarding an increase in ODA, and the Republic of Korea commits to assistance for developing countries by providing funding and relevant facilities⁶. As a number of developed countries, including the EU and UK, have formally re-committed to the 0.7 per cent target recently⁷, although they do not necessarily mention this point in the Rio+20 discussion, reaffirmation of this commitment at the Rio+20 will be feasible. Articles prioritising the least developed countries in the Zero Draft will also be welcomed.

Capacity building in each county seems to be required to move towards a green economy with respect to technological innovation, economic structural changes and taxation improvement. In this sense, the Zero Draft demands a capacity development scheme to provide country-specific advice. This demand seems to be rooted in the EU’s proposal on the formulation of a capacity development scheme to provide country-specific advice and to assist interested countries in accessing available funds and in the Republic of Korea’s proposal of a green network for capacity building. As developing countries in particular must build capacity, the Zero Draft encourages the UN to support developing countries in formulating green economy strategies and supports international and regional organisations’ activities to assist developing countries in identifying and seizing new export opportunities created by the transition towards a green economy. The Republic of Korea proposes the establishment of a Global Green Growth Partnership with a view to providing assistance for developing countries to formulate a green economy strategy and implement pilot projects. This effort may be backed by the fact that the GGGI has been established as an organisation to support the transition towards a green economy in developing countries. Focus will be put on the establishment of partnerships at the international level in the Rio+20.

⁶ PCGG (2009) introduces the increase in ODA with improved allocation for green sectors.

⁷ See the homepage of the EC, ‘Development and Cooperation – EUROPEAID’: http://ec.europa.eu/europeaid/how/delivering-aid/monterrey_en.htm, as well as DFID (2010).

4. Towards Rio+20

According to the current discussion, the outcome document is expected to consist of agreeable and concise political declarations and annexes including proposals from member countries. Bearing in mind this outcome document and in line with the above discussion, we will conclude by considering what points require further debate.

Regarding the principles of a green economy, if the definition of a green economy is not addressed, the nations can share a common understanding that a green economy is a means to achieve sustainable development that will be developed by each country according to its development level and priorities. Additionally, the necessity of assistance to developing countries from international societies based on CBDR will be reaffirmed. However, debate on the roles of emerging economies is still immature, and the conventional dichotomy between developed and developing countries may hold up negotiations. We should formulate a discussion framework to break through this potential bottleneck situation. Similarly, every country may agree on the prevention of green protectionism and new aid conditionalities in principle, but these steps have not been discussed in detail to date; e.g., no explicit definition of green protectionist policies has been established. To prevent future conflicts between countries, we should argue these issues concretely at earlier stages under the leadership of an international organisation such as the United Nations Conference on Trade and Development (UNCTAD). Briefly, conventional principles must be reconsidered and new concepts clarified.

Many policy tools to promote the transition towards a green economy need further discussion. As noted, creation of a toolbox of good practices and formulation of individual national green economy strategies are expected to be agreed upon as good practices at the Rio+20. Some of the good practices may be introduced in the annexes. In contrast, the contents of green economy indicators, a green economy roadmap and SDGs remain unclear. If Rio+20 marks the beginning of their respective creation processes, as indicated in the Zero Draft, we should also consider a relevant discussion framework. For instance, clarification of the relationship between green economy indicators and the green growth indicators that have already been developed by the OECD will be needed. As the creation of a new set of green economy indicators is expected to require significant time, we should aim for efficient work by using the green growth indicators as a basis for discussion and integrating views and opinions from emerging economies and developing countries. In relation to green economy indicators and a green economy roadmap, we should consider a discussion framework to create a green economy roadmap with goals and indicators and its relationship with SDGs, as stated in section 3.2. Similar to green economy indicators, clarification of the relationship

between SDGs and MDGs will be essential. The argument must be built on the current status; e.g., is it possible to enlarge MDGs if future fusion is considered, and are there any negative impacts of setting new goals when MDGs are not fully accomplished yet? All in all, a common understanding of the value of creation of new policy tools and consideration of an efficient framework for policy creation will be essential.

Discussion of concrete mechanisms will be a primary step for international cooperation on the green economy question. The importance of technology transfer and the commitment of developed countries to ODA continue to be emphasised, so mechanisms must now be constructed to implement them. It may be difficult to establish concrete schemes at Rio+20, but we should at least make it clear where and to which end we should argue these issues. If current progress is insufficient, we should examine the option to change mandatory organisations. Frameworks for discussion are also essential to newly proposed ideas, such as centres of excellence for green technology, innovative financial mechanisms and a capacity-development scheme to provide country-specific advice. Additionally, we must clarify functions and authorities for centres of excellence for green technology, and intensive discussion is necessary to target and secure international equality and innovative financial mechanisms. As for a capacity development scheme, we should examine compatibility with the principle of non-intervention in internal affairs and prevention of new aid conditionalities. In summary, establishment of discussion frameworks to argue concrete mechanisms will be an urgent issue.

A green economy is a stepping stone towards the long-term goal of sustainable development, and Rio+20 is a significant first step towards green economies. It will prove challenging to produce concrete solutions to all of the issues that are relevant to green economies, as indicated above. Thus, clarifying the future directions of the discussion and agreeing to begin important processes should be considered valuable progress. Originating from the global goal to create sustainable societies free from poverty, we should adopt a backcasting way of thinking, identifying important matters that need to be agreed upon at Rio+20 and then focusing on them. In doing so, I personally hope to revive the spirit of international solidarity for sustainable development fostered at the Earth Summit 20 years ago to generate meaningful outcomes on this valuable occasion.

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