Linking economic growth and sustainable development: Strategies, initiatives and activities on the international, EU and national level

ESDN Case Study No. 1

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Introduction

The recent financial and economic crises and the challenges posed by climate change have both gained much attention in international organisations and governments. The nature of this crisis situation has led to a questioning of the hegemony of economic growth as the prerogative policy objective. Thus, reflections on how to reach a more sustainable path in economic development have been reinforced. As part of this reflection process, strategies, initiatives and activities that aim to link economic growth and sustainable development have been developed or are being currently developed on different political levels.

The first ESDN case study provides an overview of some of these strategies, initiatives and activities at the international, EU and Member States level. The case study includes UNEP's Green Economy Initiative, the OECD's work on green growth and the development of the Green Growth Strategy, the 'EU 2020' strategy, the 'Growth in Transition' initiative in Austria, the Smart Economy Strategy of Ireland and the 'Prosperity without Growth' report of the UK Sustainable Development Commission. This overview and initial analysis focuses on several aspects: development process, understanding of growth and its relation to sustainable development, objectives and topics covered, governance mechanisms and tools for implementation. The case study is based on work previously undertaken for the ESDN Quarterly Report of December 2009 and an in-depth document analysis of the respective strategies and initiatives.

We would like to point out that this case study report does not include conceptual reflections and linkages of economic growth and sustainable development. This has been comprehensively covered in the ESDN Quarterly Report of December 2009 and in the academic literature (e.g. Baumgärtner & Quaas, 2010; Rapp Nilsen, 2010; Martinez Alier, 2009; Rodrik, 2008; Baumol et al, 2007; Spangenberg et al, 2002; Daly, 1996). The report contains instead an in-depth reflection on objectives, topics, processes and governance mechanisms. At the end of the report, we provide a table that compares the different strategies, initiatives and activities along various aspects listed above and a conclusion.

UNEP: Green Economy Initiative

Development Process

The Green Economy Initiative (GEI) was initiated by the United Nations Environment Programme (UNEP) and has been developed together with numerous experts from other UN organizations, academic institutes, think tanks, businesses and environmental groups. This network has been based on exchange of information and expertise on how to manage the transition towards a green economy. Envisioned as a two-year project, the GEI has been expanded to include a number of related UNEP and UN-wide initiatives. These initiatives focus on providing macro-economic evidence for significantly increasing investments in environmental issues as a means of promoting sustainable economic growth, decent job creation, and poverty reduction.

In light of the current financial crisis and in the framework of the GEI, UNEP has also launched the Global Green New Deal (GGND) in early 2009. The GGND aims to make a change in restructuring economies towards a greener development path through the use of fiscal stimulus packages (UNEP, 2009a). The GGND was prepared in consultation with over 20 UN agencies and intergovernmental organizations and shared with members of the G20 meeting in April 2009 ("London Summit"). UNEP followed-up on the initial GGND policy brief with a Global Green New Deal update (UNEP, 2009b) that was launched during the G20 meeting in September 2009 ("Pittsburgh Summit").

Understanding of economic growth and its relation to sustainable development

Both, the GEI and the GGND, deal with green investments in technology and in renewable energy in various sectors as new engines for economic growth that should lead to higher environmental protection, generating more jobs and reducing poverty. They explicitly mention as their aim the further promotion of sustainable economic growth, based on green investments and technologies (UNEP, 2009a; UNEP, 2009b). As regards the social aspects of growth, the "job creation" function of green economic growth and the various incentives in education and training are regarded as instrumental for social inclusion. The emphasis here is on actors such as businesses, educational institute, universities, business schools and governments in offering incentives and funding in education and knowledge-building (UNEP, 2009a). As regards consumption driven growth, the GEI argues that the "achievement of the desired levels of human well-being, reduced poverty, sustainable trade [...] is less likely if the production and consumption patterns of 20th century are continued" (UNEP, 2009a, 25). However, the GEI only refers to higher efficiency as tool for combating environmental degradation.

The GEI and GGND offer recommendations to governments how to move to a greener economic development path by sustaining economic growth and increasingly taking on board environmental protection and social issues (UNEP, 2009a). Therefore, the GEI and GGND refer to a 'weak sustainability position' (Daly, 1996) where economic growth and environmental protection are understood as synergetic objectives and where higher efficiency is regarded as a way out of the growth dilemma (i.e. pursuing economic stability, while at the same time reducing resource use and emissions). However, as the 'rebound effect' shows, efficiency through technological modernisation may not lead to favourable outcomes because current consumption patterns in industrialised countries stand against an absolute reduction of emission and resource use (Sedlacko & Gjoksi, 2009).

Objectives and topics covered

The Green Economy Initiative (GEI) is designed to assist governments in "greening"[1] their economies by reshaping and refocusing policies, investments and spending towards a range of sectors, such as (1) clean technologies, (2) renewable energies, (3) water services, (4) green transportation, (5) waste management, (6) green buildings and (7) sustainable

[1] Greening the economy refers to the process of reconfiguring businesses and infrastructure to deliver better returns on natural, human and economic capital investments, while at the same time reducing greenhouse gas emissions, extracting and using less natural resources, creating less waste and reducing social disparities

agriculture and forests (UNEP 2009a; UNEP 2009b). The aim is to change the policy architecture in the long-term in order to achieve a low-carbon economy without social disparities.

In comparison to the GEI, the Global Green New Deal (GGND) identifies similar sectors (i.e. sustainable transport, energy efficient building, sustainable energy, agriculture and freshwater) in which the greening of the economy should be realised through fiscal stimulus packages. The GGND has the overall objective to contribute to multi-lateral and national efforts to address in the short-term the current financial crisis and its social, economic and environmental impacts. At the same time, the inter-connected global climate, food, fuel and water challenges should be addressed that threaten society in the medium-term. The GGND has three main goals which are focussed more on the short-term interventions through the fiscal stimulus packages**:** (1) Reviving the world economy, creating employment opportunities and protecting vulnerable groups; (2) reducing carbon dependency, esteem degradation and water scarcity; (3) furthering the Millennium Development Goal of ending extreme world poverty by 2015.

Governance mechanisms and tools for implementation

UNEP and various other UN organisations stand behind the Green Economy Initiative (GEI) and work in partnership with national governments, the private sector actors, NGOs, consumer groups and various experts. Through these partnerships, UNEP has established a network of decentralised, non-hierarchical and horizontal relations with different stakeholders which is based on co-operation and trust. The aim is to assist governments in reshaping their sectoral policy architecture in order to green their economies in the long-term through exchange of resources (e.g. information, expertise, funding) amongst the various stakeholders.

The tools for this exchange can be categorised as soft policy tools that are defined by their non-binding, cooperative, educational and informative character (Treib et al, 2007; Lafferty, 2004). The implementation tools of the GEI can be clustered in three main groups:

(1) *Advisory services* to countries interested in greening their economies, by providing them with technical assistance services and coordination for regional and country level efforts in this matter;
(2) *Research products*, such as the development of GEI's flagship product, the Green Economy Report (which will be published in 2010, and is built on Global Green New Deal Policy Brief and the Green Jobs Report) or The Economics of Ecosystems and Biodiversity (TEEB) series of reports;
(3) *Partnerships* to effectively promote and implement green economy strategies.

The collaboration with stakeholders in the various attempts of greening the economy requires global efforts. These efforts are to be handled through cooperative tools such as joint efforts and guidelines, which are being harmonised at the international level through joint statement[2]. Since greening the economy is primarily a matter of national governments

[2] In June 2009, for example, UNEP, together with more than 20 UN agencies, the IMF and the World Bank, issued a joint statement on green economy which noted that the current financial and economic crisis requires

and national sectoral policies, UNEP works with various governments in helping them to implement green economic strategies (e.g. South Korea). Moreover, UNEP has also been working closely with civil society organisations and the business community. Most recently, it supported the establishment of a Green Economy Coalition, which is comprised of environment, development, business and labour groups to call on the G20 nations to follow through on their pledges to accelerate the transition to a green economy and secure a visionary global deal on climate change. Through the UNEP Finance Initiative, the GEI has also been reaching out exclusively to the business sector and key financial institutions.

The GGND shows the same characteristics as the GEI in terms of governance, but it directly addresses the G20 countries which are the main environmental polluters (UNEP, 2009a). The proposed tools in the GGND policy brief (UNEP,2009b) are grouped under three categories:

(1) *targeted stimulus spending* in 2009-10;
(2) *changes in domestic policies*: legislation, subsidies, introducing fiscal measures like taxes and incentives to promote greater use of renewable versus fossil fuels, public transport versus private cars, etc; and
(3) *changes in international policy architecture*: international trade, international aid, a global carbon market, global markets for ecosystem services, development and transfer of technology, and international coordination for a GGND.

OECD: Work on Green Growth

Developments Process

The world main economies, represented through their ministries in the OECD ministerial council, gathered in June 2009 at a Ministerial Council Meeting (MCM) to discuss "green growth" as a potential way out of the economic crisis and to open up new prospects for the climate change negotiation in the Copenhagen Summit of Climate Change in late 2009. Ministers from all 30 OECD countries[3] as well as Chile, Estonia, Israel and Slovenia signed a Declaration on Green Growth (OECD, 2009a) and endorsed a mandate for the OECD to develop a Green Growth Strategy (GGS).

The development process of the OECD's Green Growth Strategy is initiated by the OECD member countries and will be developed as a horizontal project by various committees and directorates of the OECD (OECD, 2009b). The development process can be categorised as top-down as other governance authorities at local and regional level and various stakeholders groups (e.g. civil society organisations, businesses) are not directly included. A

a collective response from the global community that lays a solid foundation for shared growth and sustainable development.

[3] Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States (see OECD homepage).

final report on the GGS will be delivered at the 2011 MCM, with an interim report being prepared for the June 2010 MCM (OECD, 2009c). The GGS is aimed to serve as an orientation document for policies at the national level of OECD member countries.

Understanding of economic growth and it relation to sustainable development

Green growth is identified in the OECD Brochure on Green Growth (OECD, 2009c) as the means by which the current economy can make the transition to a sustainable economy. According to this document, the engines of green growth are investments in environment or so called 'green investments' (OECD, 2009c). Though the OECD Brochure on Green Growth recognises that in the recent years "most countries have not succeeded in meeting their own national commitments to decrease their GHG emissions" (OECD, 2009c, 1), 'decoupling' is considered as an efficient tool to achieve economic growth and less resource usage. It has not been clarified yet however, what countries should do differently in the future to achieve 'decoupling'.

Since the Green Growth Strategy is still under development, there is only little information available on the linkages of economic growth and sustainable development. However, in the OECD Brochure on Green Growth, the need for a new model of growth is stressed "that is much less intensive in natural resources and that can lead to social well-being and poverty reduction in both developed and developing countries" (OECD, 2009c, 2). For meeting the requirements of this new model, no further specifications are provided, e.g. concerning the changes of current economic development model or economic structure in Western countries. Regarding the social dimension, the OECD Declaration on Green Growth argues that green growth generates new potentials for education and job creation in new green sectors of the economy. Green growth is observed as functional for meeting the employment and social inclusion goals on the labour market (OECD, 2009c).

To sum up, based on the OECD Declaration on Green Growth and other work of the OECD on this topic, green growth is identified as a means for a sustainable economic path and as a "win-win policy solution" for achieving a low-carbon and inclusive sustainable development, while also creating opportunities for climate change mitigation and job creation (OECD, 2009b, 3). When analysing the proposals made in the OECD Brochure on Green Growth (OECD, 2009b), once can discern a 'weak sustainability position' because consumption-driven economic growth and environmental protection are understood as synergetic objectives through 'decoupling' and 'higher efficiency'.

Objectives and topics covered

The overarching goal of the Green Growth Strategy, as outlined in the OECD Brochure on Green Growth, is to identify "a policy framework that blends economic, social and environmental policy objectives for the most efficient shift to a sustainable world economy" (OECD, 2009c, 2). This should happen in the short-term through the fiscal packages that should allocate new green investments in crucial sectors of the economy and in the long-term by building an environmentally friendly infrastructure (OECD, 2009a, 2).

The topics which will be covered in the strategy are still under development, but the OECD Declaration (OECD, 2009a) on Green Growth and the Brochure on Green Growth (OECD, 2009c) identify priority areas which could be included in the forthcoming strategy, such as (1) climate change, (2) poverty reduction, (3) sustainable management of resources, (4) sustainable consumption and production, (5) energy security, (6) education, (7) trade, and (8) governance. In order to address cross-sectoral challenges, the development process of the Green Growth Strategy is one of the OECD's horizontal projects that draws on the expertise of 25 OECD committees.[4]

Governance mechanisms and tools for implementation

The Green Growth Strategy aims to include implementation prescriptions for the international and national level: At the international level, the OECD will offer a platform for co-ordination and dialogue through the International Green Growth Dialogue initiative. For a better coordination between the international and national level, various policy instruments are aimed to coordinate the work:

a) setting key policy principles for the transition to a green economy,
b) providing a policy toolkit,
c) evaluating green growth policies at the national level,
d) developing green growth indicators,
e) undertaking peer review, and
f) sharing best practices and lessons learnt among OECD member countries.

Subsequently, the OECD Strategy on Green Growth will serve as a policy framework for the national policies, providing a flexible implementation approach of the strategy at the national level in order to adapt these policy tools to the different national contexts, e.g. investments, taxes, innovation, technology, trade, employment and education (OECD, 2009c). Implementation of the strategy at the national level will be monitored and assessed through peer reviews, green growth indicators and shared best practices (OECD, 2009c).

This governance mechanism is called *Open Method of Coordination (OMC)* that is characterized by a high level of discretion and low-level of obligation in the policy instruments between the international and national level (Schäfer, 2006). The OMC is used by the OECD as a governance method in a multi-level, decentralized policy decision-making system. It aims to achieve coordination and policy cohesion across the government levels and a proper implementation of policies/strategies.

European Union: 'Europe 2020' strategy

Development process

The "Europe 2020" strategy was published on 3 March 2010 and will be the successor of the Lisbon Strategy, the 10-year development program that included the strategic goal of the EU

[4] The OECD is implementing an increasing number of horizontal programmes and projects, which bring together the interdisciplinary skills of several OECD Committees and Directorates, while also promoting interactions across ministries and greater policy coherence in OECD countries (OECD 2008).

“to become the most competitive and dynamic knowledge-based economy in the world” (European Council, 2000, para 5). The results of the Lisbon Strategy have been mixed and its main targets have not been reached (European Commission, 2010a). With the incoming new European Commission and as a response to the economic and financial crisis, a new 10-year development strategy of the EU has been proposed by the Commission and will be decided by the heads of state of the EU-27 at the European Council meeting in Brussels on 25-26 March 2010.[5]

For the “Europe 2020” strategy development, a consultation process was launched by the European Commission in November 2009. The consultation document outlined three key priorities – creating value by basing growth on knowledge, empowering people in inclusive societies and creating a competitive, connected and greener economy – on what was then called “EU 2020” strategy and proposed ways how to achieve them (European Commission, 2009). The consultation process was open until 15 January 2010. In total, the Commission received around 1,400 responses from a variety of stakeholder groups, i.e. national and sub-regional authorities, EU-level bodies, trade unions and business associations, NGOs as well as think-tanks and universities. All contributions can be accessed at a special section on the Commission homepage. Moreover, an overview paper on the responses received during the consultation phase was put together (European Commission, 2010b). It is argued in there that “the Commission has carefully analysed all responses and will strive to take them into account as it prepares its proposal for the upcoming European Council” (ibid, 3).

Understanding of economic growth and its relation to sustainable development

The “Europe 2020” strategy can be seen as a strategic and coordinated attempt of the EU to face the challenges posed by the recent economic and financial crisis. Economic growth is still defined as the major objective and generally not questioned. However, ‘transformation’ and ‘interrelated issues’ are terms often used that may point towards a more integrative approach of growth and its relation to sustainable development: the subtitle of the strategy refers to “smart, sustainable and inclusive growth”.

In its introductory chapter, the “Europe 2020” strategy points out that economic crisis has been “a huge shock” and wiped out “steady gains in economic growth and job creation” (European Commission, 2010c, 5). Moreover, it is argued that the crisis “made the task of securing future economic growth much more difficult” (ibid, 5). The strategy constitutes that the crisis showed some problem areas and that there were “many areas where Europe was not progressing fast enough relative to the rest of the world” (ibid, 5): (a) Europe’s average growth rate has been structurally lower, compared to competitors, due to a productivity gap, (b) employment rates have been significantly lower and (c) demographic ageing has been accelerating since many years.

The strategy presents the argument that the “the biggest challenge is to escape the reflex to try to return to the pre-crisis situation” (European Commission, 2010c, 5) and that facing up to the immediate and long-term challenges of recovery would be important to “make up for

[5] In March 2010, the European Council is going to decide on the overall approach and main targets of the strategy. In June 2010, details aspects of the strategy, including the integrated guidelines and national targets will be decided by the European Council.

the recent losses, regain competitiveness, boost productivity and put the EU on an upward path of prosperity” (ibid, 6). As an exit out of the crisis and as a way forward towards a new economy, the “Europe 2020” strategy proposes a “smart, sustainable and inclusive growth” (ibid, 8).

Objectives and topics covered

The “Europe 2020” strategy put forward by the European Commission is based on three priorities and accompanying ‘flagship initiatives’ (which define actions at the EU and Member State levels):

1) *Smart growth* refers to strengthening knowledge and innovation as drivers for future growth. The strategy points out that the EU should be particularly active in three areas:
    - *Innovation:* apart from increasing the total amount of R&D spending (currently below 2 % in the whole EU), focus should be put on the composition and impact of research spending as well as on improved conditions for private sector R&D. The flagship initiative is called, “Innovation Union”, and aims to refocus R&D and innovation policy on current societal challenges, e.g. climate change, energy and resource efficiency, health, etc.
    - *Education, training and life-long learning* should be intensified. The flagship initiative is called “Youth on the move” and aims to increase the quality of education on all levels.
    - The *digital society* is another area which should be further development, particularly information and communication technologies. With the flagship initiative, “A Digital Agenda for Europe”, economic and social benefits from a Digital Single Market should be achieved.

2) *Sustainable growth* aims at “building a resource efficient, sustainable and competitive economy, exploiting Europe’s leadership in the race to develop new processes and technologies (...) and reinforcing the competitive advantages of our businesses” (European Commission, 2010c, 12). Two areas are considered of main importance in this priority:
    - Improving *competitiveness* of the EU compared to its main trading partners through higher productivity and maintaining a lead role in the market for green technologies. The flagship initiative, “An industrial policy for the globalisation era”, aims to improve the business environment for companies and to support a sustainable industrial base to compete globally.
    - *Climate change and energy* refer to reducing GHG emissions, exploiting fully the potential of new technologies, energy security, the use of renewable energy sources and increasing energy efficiency. In the flagship initiative, “Resource efficient Europe”, the aim is to support a shift towards a low-carbon economy and to decouple economic growth from resource use.

3) *Inclusive growth* aims at empowering people through high levels of employment, increased skills, fighting poverty and modernising labour markets. The areas identified for the need of action are:

- *Employment and skills* refers to raising the total employment rate within the EU and requiring new skills through life-long learning in larger parts of the population. With the flagship initiative, "An Agenda for new skills and jobs", conditions for modernising labour markets to raise employment levels and to ensure the sustainability of the European social model should be created.
- More efforts should be undertaken to *fight poverty*. The flagship initiative, "European Platform against Poverty", should not only ensure economic, social and territorial cohesion but should also combat poverty and social exclusion.

In order to achieve the set priorities, the "Europe 2020" strategy presents five headline targets:

i. An employment rate of at least 75 % of the population aged 20-64.
ii. Achieving the target of 3 % GDP investment in R&D.
iii. Achieving the "20/20/20" objective in climate change and energy: 20 % GHG reduction compared to 1990, 20 % share of renewable in total energy consumption, and 20 % increase in energy efficiency.
iv. Reducing the share of early school leavers to 10 % which increasing the share of the population (aged 30-34) having tertiary education to 40 % in 2020.
v. Reducing the number of EU citizens who live below the national poverty lines by 25 %.

The objectives of the "Europe 2020" strategy show that a more integrative approach towards economic development is envisioned which also takes into account environmental as well as work-related and social issues. The approach suggested for linking growth and sustainable development is largely characterised by innovation, a technological orientation and a mix of different objectives (e.g. high-quality education, tackling climate change, energy efficiency, poverty reduction, etc) which would require strong efforts towards policy integration in the implementation phase.

Governance mechanisms and tools for implementation

In order to achieve the priorities and objectives outlined in the "Europe 2020" strategy, a governance framework is defined. This comprises an architecture for implementation and an overview of responsibilities of involved policy levels, institutions and actors.

It is proposed to organise the strategy implementation in terms of a thematic approach and country surveillance. The *thematic approach* refers to the three priorities of the strategy and, in particular, the delivery of the five headline targets (see above). As instruments for achieving this, the "Europe 2020" programme and the flagship initiatives should be the main instruments. Efforts on the EU and Member States level will be required to put the strategy objectives into practice, some of them already described in the strategy itself. Additionally, *country reporting* should help Member States "do define and implement exit strategies, to restore macro-economic stability, identify national bottlenecks and return their economies to sustainable growth and public finances" (European Commission, 2010c, 25).

The strategy suggests two instruments for the implementation of the strategy: A small set of ***integrated "Europe 2020" guidelines*** should replace the 24 existing guidelines. Additionally,

policy recommendations should be addressed to the Member States – both for the thematic approach and the country reporting. The recommendations regarding the thematic approach would provide detailed advice on mirco-economic and employment challenges, while the recommendations regarding country reporting would address issues with significant macro-economic and public finance implications. Recommendations are intended to be "precise and normally provide a time-frame within which the Member State concerned is expected to act (e.g. two years)" (European Commission, 2010c, 26). Compared to the Lisbon Strategy governance process, these recommendations are not only going to have a much more comprehensive role in the "Europe 2020" strategy process, but their compliance will be monitored also more strictly: "If a Member State, after the time-frame has expired, has not adequately responded to a policy recommendation of the Council or develops policies going against the advice, the Commission could issue a policy warning" (ibid, 26).

In terms of ***responsibilities in the implementation phase***, it is proposed that the European Council provides overall guidance and steering for the strategy. This should ensure the horizontal (between different policy sectors) and vertical (between different tiers of government) integration of the strategy process. The European Commission is supposed to monitor strategy implementation in an annual report. The report should assess the meeting of the headline targets and assess the country reports as well as stability and convergence programmes. Issuing policy recommendations and, if necessary, warnings will also be part of the Commission's role. The European Parliament's role is described not only as co-legislator but as "a driving force for mobilising citizens and their national parliaments" (European Commission, 2010c, 27). National and sub-national governments are called for implementing the strategy by developing national reform programmes. With regards to the stakeholder and civil society community, the European Economic and Social Committee (EESC) and the Committee of the Regions (CoR) are mentioned and both should be closely associated in the strategy process. The "Europe 2020" strategy points out that "exchange of good practices, benchmarking and networking (...) has proven another useful tool to forge ownership and dynamism" in the context of implementing previous and current EU strategies.

Austria: 'Growth in Transition' initiative

Development Process

'Growth in Transition' was initiated by the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management in cooperation with the Sustainable Europe Research Institute (SERI) and a consultancy (Karuna Consult). The initiative is generally conceptualised as a stakeholder dialogue and involves partners from various sectors: other national ministries (Federal Chancellery as well as the ministries of labour, finance, science, and economy), Austrian chamber of commerce and federation of industries, two Austrian regional authorities, NGOs, an international company (REWE Group) and the Club of Rome.

The initiative has started in 2008 and, so far, four workshops, a book presentation and an international conference have been organised that involved policy-makers, researchers, experts and several stakeholder groups to collect ideas and suggestions on what kind of growth is perceived as sustainable in terms of environmental and social aspects.

Understanding of economic growth and its relation to sustainable development

In the framework of the 'Growth in Transition' initiative, an edited book was compiled to discuss the possibilities of a qualitative growth entitled, "What kind of growth is sustainable?". Generally, the book argues that economic growth is fundamental for securing jobs, international competitiveness and tax revenues of a state, but there is a need for a qualitative growth more compatible with sustainable development. The alternative kind of growth suggested in this book should comply with sustainable development aspects: this means that the provision of services and utilities, which increase human well-being, should be designed in such a way as not to reduce the natural stock per capita. In order to overcome a market-oriented consideration of economic activities, an approach should be chosen which, besides real and financial capital, should also include natural, human and social capital. An increase in quality-of-life, along with a positive subjective perception of people, should become the focus and the objective of qualitative growth. The need for infinite economic growth, for competition in markets and for social status usually fosters resource consumption and may ultimately lead to addictive consumption behaviour. Therefore, the book calls for changes in social structures and in the logics of consumption-driven growth. It, therefore, poses substantial questions to the current economic and societal model.

To sum up, the Austrian 'Growth in Transition' initiative questions traditional forms of growths and aims to develop an innovative approach to growth that is driven by sustainable development characteristics.

Objectives and topics covered

The 'Growth in Transition' initiative involves different institutions which organize activities focusing on the same core issue but from different angles. Therefore, the initiative aims to raise awareness among the policy-makers and stakeholders on the link of economic growth and sustainable development and intends to trigger a dialogue among institutions and stakeholders about how the transformation process towards can be shaped towards sustainability. It also aims at contributing to current EU and international processes and at informing the Austrian public about them.

The international conference, "Growth in Transition", which was held in Vienna in late January 2010, brought together international and national experts to deepen the discussion and reflection process. The conference deliberately tackled a broad range of topics in order to involve as many stakeholders as possible. The key topics of the conference were: (1) money and the financial System, (2) growth and resource use, (3) social justice and poverty, (4) macro-economics for sustainability, (5) quality of life & measurement of prosperity, (6) work and sustainable development, (7) regional aspects, (8) governance, (9) sustainable production and consumption, and (10) sustainable management of businesses. A documentation of the conference can be found at the 'Growth in Transition' homepage.

Governance mechanisms and tools for implementation

The 'Growth in Transition' initiative has the main objective to foster discussions and reflections among a broad stakeholder community on what kind of growth is sustainable. Although it was initiated by the Austrian Ministry of Environment, in cooperation with five other national ministries, no concrete follow-up procedures for the results of the work undertaken (in the book, workshops and international conference) have yet been specified nor have governance mechanisms and policy tools been developed to implement the results of the initiative.

Ireland: Smart Economy Strategy

Development process

The policy strategy 'Building Ireland's Smart Economy: A Framework for Sustainable Economic Renewal' was adopted by the Irish Government in December 2008. It sets out a set of actions to reorganise the economy over a five year period (2009-2014) and to secure the prosperity of current and future generations. The strategy provides a framework "to address the current economic challenges and to build a 'Smart Economy' with a thriving enterprise sector, high-quality employment, secure energy supplies, an attractive environment, and first-class infrastructure" (Government of Ireland, 2008, foreword).

The strategy development was initiated by the Cabinet Committee on Economic Renewal (chaired by the Prime Minister's Office) and developed with contributions from the social partners and various committee departments that participated in detailed and intensive discussions on measures of the strategy. Therefore, the strategy is consistent with the principles and visions underpinning 'Towards 2016' (the current social partnership agreement, a ten year strategic framework for economic and social development) by using the established mechanisms of the social partnership process in Ireland (Government of Ireland, 2008). The Prime Minister's Office plays an important role in acting as a link between the President, the Prime Minister and other government departments in coordinating sectoral policies. Therefore, the Prime Minister's Office, as the initiator of developing the strategy, shows a strong leadership in the development and implementation process. The development process can be categorised as a top-down process, as it is developed from the highest government level and implemented by various government levels and social partners.

Understanding of economic growth and its relation to sustainable development

The 'Smart Economy', as defined by the strategy, "combines the successful elements of the enterprise economy and the innovation or 'ideas' economy while promoting a high-quality environment, improving energy security and promoting social cohesion" (Government of Ireland, 2008, 32). 'Smart Economic Growth' recognises the interdependence between *four forms of capital accumulation* that drive the economic and social progress of the nation: (1) human or knowledge capital – the skills, knowledge, ingenuity and creativity of people; (2) physical capital – the stock of infrastructure that is used to produce goods and services, e.g.

machinery, buildings, transport and communications networks; (3) natural or environmental capital – naturally-provided assets and the quality of the surrounding environment within which people live and work; (4) social capital – the networks, connections, mutual trust and shared values and behaviours of the population.

The "smart growth" includes the concepts of "green growth". While, according to the strategy, a key feature of smart growth is building on the innovation or 'ideas' component of the economy through the utilisation of human capital, green growth in this strategy implicates a shift from fossil fuel based energy production to renewable energy and increased energy efficiency to reduce demand (Government of Ireland, 2008). The 'new engines of growth' are, therefore, investments in renewable energy, new technologies and innovation, combining higher productivity and higher energy efficiency through various sectors. The unsustainable consumption and production patterns are recognised mostly in the field of energy, where a change of patterns could be driven though green technologies and investments in renewable energy.

According to the strategy, the smart economy concept is consistent with "moving from an emphasis on quantitative growth to qualitative development" (Government of Ireland, 2008, 35), for following reasons: (1) It links economic growth with higher welfare and standards of living through increased innovations and resulting productivity; (2) it links economic growth with better environmental performance through investments in energy efficiency and new technologies making growth less resource intensive; and (3) it links economic growth with the social dimension (as higher productivity goes hand in hand with higher education and a contribution to a more social inclusive society)[6]. Moreover, the Smart Economy Strategy postulates that the economy can not grow infinitely at exponential growth rates. After recovering from the economic crisis, the economy should grow at steady rate: "The Green Economy mitigates against a 'boom and bust' growth path and is based on the principle of sustainable development with a steady rate of growth in an economy less prone to external shocks."(Government of Ireland, 2008, 35)

The concept of a Smart Economy shows similarities with the capital approach of sustainable development, presented in the ESDN Quarterly Report December 2009. It recognises the interdependence between the sustainability level in the various capital forms and provides information how sustainable an economy is: "A smart economy is a low-carbon economy, with sustainable development as its ultimate aim." (Government of Ireland, 2008, 33) Nevertheless, the strategy hold a 'technologically optimistic position', combined with the political instruments of decoupling economic growth from environmental performance. Though some resources are exceedingly difficult and costly to reproduce with technology – such as ecosystems and the life-support services of the biosphere – the strategy supports the idea that substitutes for resources can be invented through technological modernization and higher energy efficiency. The strategy also introduces the concept of steady growth rates which should, however, not be confused with the steady state economy theory[7].

[6] The Smart Economy Strategy does not address all of the policy challenges which arise from the interdependence of economic and social policy issues. These are being reflected and set out in *Towards 2016.*

[7] The steady state economy is an entirely physical concept. Any non-physical components of an economy (e.g., knowledge) can grow indefinitely. But the physical components (e.g. supplies of natural resources, human populations and stocks of human-built capital) are constrained by the laws of physics and beholden to ecological relationships. An economy could reach a steady state after a period of growth or after a period of

Objectives and topics covered

The strategy presents the Irish Government's vision for the next phase of Ireland's economic development which is "to make Ireland the innovation and commercialization hub of Europe – a country that combines the features of an attractive destination for innovative multi-nationals while also being an incubation environment for the best entrepreneurs from Europe and beyond" (Government of Ireland, 2008, 8). Therefore, the primary objective of this document is to outline a pathway forward which acknowledges the severe short-term economic challenge, while focusing on how to achieve a sustainable economy in the medium-term.

For serving this vision, the strategy sets out action areas for the next 5 years:

(1) Securing the enterprise economy and promoting competitiveness in construction;
(2) Building the ideas economy – establishing the 'Innovation Island';
(3) Enhancing the environment and securing energy supplies;
(4) Investing in critical public infrastructure; and
(5) Efficient and effective public services and smart regulation

In each action area, the strategy presents a list of key actions, some very detailed with quantified goals and timeframes.

Governance mechanisms and tools for implementation

The governance mechanisms of the strategy imply a substantial integration approach, both horizontal/cross-departmental and vertical/across all levels of government: "This strategy for Building Ireland's Smart Economy will be prioritised and driven across all levels of Government" (Government of Ireland, 2008, 105). The coordination of sectoral policies should take place across various ministerial departments and relevant ministers will need to report regularly and systematically on progress in the key action. Moreover, a task force was established by the Prime Minister in 2009 that should help in implementing the strategy. The task force is chaired by the Secretary General of the Prime Minister's Office and its members stem from businesses, academia and various government ministries. The task force met for the first time in July 2009 and is going to present a report to the Irish Government on the implementation of the strategy in March 2010.

It is important to emphasize in this context that the policy actions foreseen in the strategy are linked to existing actions, policies and strategies under the Programme for Government (2007-2012) and related policy documents. This is considered as essential in order to re-orientate policy around the framework on economic renewal (Government of Ireland, 2008). As for example in the various sectors, the strategy coordinates the various actions with other existing strategies as in the development of green technologies, the Strategy for Science, Technology and Innovation (2006-2013) or in the field of building the necessary infrastructure for a shift to green technology the actions are coordinated with the National

downsizing or degrowth. The objective is to establish it at a sustainable scale that does not exceed ecological limits (Daly, 1996).

Spatial Strategy (2002-2020). This shows the interconnectedness of different sectoral and cross-sectoral strategies and a strategic public management approach in Ireland.

For the implementation of the strategy, a mix of hard and soft policy tools are applied:

(1) Economic tools: sectorally targeted fiscal stimulus efforts, such as tax regulations, incentives for investments, a capital investment programme for a green smart economy;
(2) Regulation: such as building regulation for higher energy efficiency and a shift to renewable energy; public transport regulation bill in order to reform the licensing to the bus market;
(3) New action plans or strategies: in various sectors, such as in education, health, energy or transport;
(4) Establishment of institutional arrangements: to assist in implementing the different sectoral plans.

The participation of various stakeholders, especially collaboration with the social partners in order to better link the interdependences of economic and social policy, is regarded as crucial for the implementation of the strategy. Moreover, a high-level action body on green enterprises is going to be established with the aim to develop an action plan for green enterprises in Ireland, across the various sectors of the economy.

UK: 'Prosperity without Growth' report

Development Process

The "Prosperity without Growth" report was published by the UK Sustainable Development Commission (SDC). The SDC is the UK Government's independent advisory body on sustainable development and in 2006 it became the Government's 'watchdog' on sustainable development, i.e. it reports on how effectively the UK Government promotes sustainable development in policy-making. In its advisory role, the SDC produces evidence-based public reports on contentious environmental, social and economic issues that it submits to the UK Government. In 2008, the SDC assigned its Economics Commissioner, Professor Tim Jackson from University of Surrey, to prepare a report that helps to rethink the current economic systems and to reflect on the link between economic growth and sustainable development. The report, "Prosperity without Growth", was published in March 2009 and is the culmination of extensive work undertaken in the work programme on 'Redefining Prosperity' which has been developed at the SDC over five years; moreover, the report builds on work from across the SDC. The 'Redefining Prosperity' programme included several workshops and seminars and involved various stakeholders (policy-making and research). The research team at the University of Surrey contributed to the evidence base of the report.

Understanding of economic growth and its relation to sustainable development

The report analyses the relationship between growth and the growing environmental crisis and "social recession" (i.e. increasing life dissatisfaction, mental diseases) of modern societies. When analyzing the understanding of growth and its relation to sustainable development, the reports suggest that finding solution for the 'dilemma of growth' should be the starting point: According to the report, the social dilemma of economic growth is that growth is supposed to deliver prosperity but has in many ways failed to do so. Though there are many reasons why continued economic growth is a necessary condition for a lasting prosperity[8], our ability to flourish (life satisfaction, metal health, happiness) has diminished substantially. The report defines 'prosperity' as "the possibility that humans can flourish, achieve greater social cohesion, find higher levels of wellbeing and still reduce their material impact on the environment" (SDC, 2009, 38). Viewed from an environmental perspective, the dilemma of growth points, on the one hand, to the desire to maintain economic stability and, on the other hand, to the need to reduce resource use and emissions: "This dilemma arises because environmental impacts 'scale with' economic output: the more economic output there is, the greater the environmental impact – all other things being equal." (SDC, 2009, 76)

In this context, it is crucial to understand the sources of this dilemma. According to the report, the growth dilemma has its sources in two underlying, inter-related features of the economy cycle: the consumption and production patterns driving further economic growth. On one side, the profit motive stimulates newer, better or cheaper products and services through a continuous process of innovation and "creative destruction" (SDC, 2009, 60). At the same time, the market for these goods relies on an expanding consumer demand, driven by a complex social logic. The report argues that these two factors combined drive 'the engine of growth' on which modern economies depend and lock the society in to an 'iron cage' of consumerism (SDC, 2009, 62). This consumption-driven growth, which has – according to the report – failed to bring more prosperity, has been supported so far from various factors (SDC, 2009):

a) From the macro-economic perspective, economic growth has proved to be the only 'defensive mechanism' against unemployment and destabilization. De-growth has, in some ways, proved to be environmentally sustainable but unstable due to decreasing productivity.
b) From the social/individual perspective, consumption-driven growth lies in the culture of the current consumerism of our societies. This logic describes the tendency of individuals to consume more and more since goods have a positional and status symbol for many people.
c) From the political perspective, 'decoupling' and 'higher efficiency' have been the preferred policy prescriptions as a way to mitigate consumption-driven growth.

[8] The report mention three reason: Firstly, material opulence is necessary for flourishing. Secondly, economic growth is closely correlated with certain basic 'entitlements' – for health or education, perhaps – that are essential to prosperity. Thirdly, growth is functional in maintaining economic and social stability, while de-growth appears to be unstable (SDC, 2009).

Therefore, by analyzing what should be changed, the report confronts the structure of modern economies. It argues that a different kind of growth is required as well as a societal and institutional transformation for changing the current consumerism culture. A 'different kind of growth' should reduce the structural reliance on consumption growth and provide a different mechanism to achieve underlying stability. Growth should be "based on non-polluting energy sources and selling non-material services, not polluting products" (SDC, 2009, 76). The report argued that initiatives around 'green economy' and 'green growth' are a first step towards the transformation of the current economic growth to more environmental sustainability. However, green economy and growth would still be based on consumption growth as a key driver, which is the source of the dilemma.

To sum up, the report challenges the assumption of continued economic expansion based on consumption in rich countries and describes that prosperity is possible without consumption-driven economic growth. In contrast to other strategies in this case study report, it argued for the need to set environmental and social limits to economic growth and change the consumer culture of our societies.

Objectives and topics covered

An important aim of the report is to provide a coherent foundation for policies and to help strengthen the national government in taking forward these policies. The report presents as main argument that "for the advanced economies of the Western world, prosperity without growth is no longer a utopian dream. It is a financial and ecological necessity." (SDC, 2009, 12) For the moving towards a sustainable economy, the report presents 12 steps that fall within three categories:

(a) Building a sustainable macro-economy

The report argues that time is ripe to develop a new macro-economics for sustainable development that does not rely for its stability on relentless growth and expanding material throughput. Four specific policy areas are identified to achieve this:

1) developing macro-economic capability
2) investing in public assets and infrastructure
3) increasing financial and fiscal prudence
4) reforming macro-economic accounting

(b) Protecting capabilities for flourishing

It is pointed out that lasting prosperity can only be achieved by freeing people from materialistic consumerism and providing creative opportunities for people to flourish – within the ecological limits of the planet. Five policy areas should address this challenge:

5) sharing the available work and improving the work-life balance
6) tackling systemic inequality
7) measuring capabilities and flourishing
8) strengthening human and social capital
9) reversing the culture of consumerism

(c) **Respecting ecological limits**

“Prosperity without Growth” claims that there is an urgent need to establish clear resource and environmental limits on economic activity and to develop policies to achieve them. Three policy suggestions are made to contribute to this task:

10) imposing clearly defined resource/emissions caps
11) implementing fiscal reform for sustainability
12) promoting technology transfer and international ecosystem protection

More detailed definitions and examples for each of the 12 steps can be found in the report (SDC, 2009, 103-107).

Governance mechanisms and tools for implementation

The UK Sustainable Development Commission (SDC) intends to generate discussion and debate on the issues and challenges that the report raises. The report has been sent to the UK Prime Minister, national government ministers and government leaders in the devolved administration as well as to business and civil society representatives. As national sustainable development commission, the SDC cannot develop and deliver policies but can only make proposals to the UK Government.

According to the report, ‘governance for prosperity’ should engage actively with citizens, both in establishing the mandate and delivering the change for lasting prosperity. The governments should play a vital role as the principal agent in protecting the shared societal prosperity and a key responsibility for macro-economic stability (SDC, 2009). Especially for the latter, governments are currently in a conflict situation: for as long as macro-economic stability depends on economic growth, governments will have an incentive to support social structures that pursue this goal, especially when it comes to boost sales. The pursuit of narrow growth, which is reinforced by materialistic and individualist thinking, represents a “distortion of the common good” and will try to undermine the legitimate role of the government (SDC, 2009, 98). Therefore, the report suggests that governments should undertake measures on freeing the macro-economy from structural requirements for consumption-growth. Subsequently, this would free governments to play their role in delivering social and ecological goals and protecting long-term interests. According to the report, a new vision of governance that embraces this role is urgently needed.

“Prosperity without Growth” also proposes several governance measures and implementation tools for achieving the goals outlined in the report, comprising of

(a) **economic policy tools**: fiscal reform, i.e. shifting the burden of taxation from incomes onto resources and emissions; incentives for investments to developing macro-economic capabilities for sustainable development.
(b) **changes in domestic polices:** improving the work-life balance**,** creating and protecting shared public spaces; strengthening community-based sustainability initiatives; reducing geographical labor mobility; providing training for green jobs; building statistical capacities for measuring prosperity.
(c) **establishing a global technology fund:** to invest in renewable energy, energy efficiency, carbon reduction, and the protection of ‘carbon sinks’ (e.g. forests) and biodiversity in developing countries.

Overview table: strategies, initiatives and activities

The table below provides an overview of the six presented strategies, initiatives and activities along four criteria, (i) development process, (ii) understanding of growth and its relation to sustainable development, (iii) objectives and topics and (iv) governance mechanisms and policy tools for implementation.

	UNEP: Global Economy Initiative	OECD: Work on Green Growth	EU: "Europe 2020" strategy	Austria: 'Growth in Transition'	Ireland: Smart Economy Strategy	UK: 'Prosperity without Growth'
Development process	Global Green Initiative (GEI): Initiated by UNEP and developed together with experts from other UN organisations, academia, think tanks, businesses and environmental groups. Global Green New Deal (GGND): Developed in the framework of GEI. Prepared in consultation with UN organisations and intergovernmental organisations and shared with members of the G20 meetings in 2009.	The Ministerial Council Meeting (MCM), representing the 30 OECD member countries, signed a Green Growth Declaration and endorsed the OECD to develop a Green Growth Strategy (GGS). The GGS will be developed as a horizontal project by various OECD committees and directorates. An interim report on the GGS will be available in June 2010 MCM; the final report on the GGS will be delivered to the 2011 MCM that will take a decision on the GGS.	The "Europe 2020" strategy is a communication from the European Commission. The strategy will be deciced by the Spring European Council in late March 2010. For developing the strategy, the Commission launched a consultation process from November 2009 to mid-January 2010. In total, about 1,400 responses to the consultation document "EU 2020" strategy were received from a variety of stakeholder groups.	"Growth in Transition" was initiated by the Austrian Ministry of Environment. The initiative is conceptualised as a stakeholder dialogue and involved partners from various sectors, e.g. five national ministries, the business sector, regional authorities, NGOs, etc. Started in 2008, the initiative has so far organised four workshops and one international conference.	The Smart Economy Strategy is a policy strategy that was adopted by the Irish Government in December 2008. It sets out a set of actions to reorganise the country's economy over a five-year period (2009-2014). The strategy was initiated by the Cabinet Committee on Economic Renewal (chaired by the Prime Minister's Office). It was developed with contributions from the social partners and various committee departments.	The report, "Prosperity without Growth", was published in 2009 by the UK Sustainable Development Commission (the UK Government's independent advisory body and watchdog on sustainable development issues) and compiled by the Economics Commissioner, Prof. Tim Jackson. The report builds on work undertaken in the 'Redefining Prosperity' programme of the SDC as well as on work from across the SDC. The 'Redefining Prosperity' programme included several workshops and seminars and involved various stakeholders (policy-making and research).
Understanding of growth & relation to SD	Investments in green technologies and renewable energy are considered as new engines for growth. Higher efficiency should serve as tool for combating environmental degradation; education and training as a tool to create more jobs. Focus on sustainable economic growth but taking into account more environmental and social issues.	Economic growth should be achieved by 'green investments', less intensive resource use and a stronger consideration of social well-being and poverty reduction. To achieve this, decoupling and higher efficiency are considered as appropriate tools.	The strategy can be seen as attempt of the EU to face the challenges posed by the economic and financial crisis (first steps for an exit from the crisis are described). Economic growth is still the major objectives and generally not questioned. Howerver, references to 'transformation' (no return to the pre-crisis situation intended) and 'inter-related issues' may point towards a more integrative approach. The proposed way forward is defined as "smart, sustainable and inclusive growth". The main aim of the strategy is to "regain competitiveness, boost productivity and put the EU on an upward path of prosperity".	Although economic growth has important functions in Western societies, the "Growth in Transition" initiative refers to the need for more qualitative growth that is compatible with sustainable development. Qualitative growth refers to quality-of-life, human well-being, social cohesion, etc. Therefore, traditional understandings of economic growth are questioned and innovative approaches of growth are sought after.	The Smart Economy Strategy recognises the interdependence of four forms of capital (human, physical, natural and social). Moving from quantitative growth towards more qualitative development should be guided by investments in renewable energy, new technologies and innovation, combining higher productivity and higher energy efficiency. The strategy also questions the infinite growth paradigm of traditional economic growth approaches.	The report argues that finding a solution to the current 'growth dilemma' is crucial. The growth dilemma refers to the economic growth objective to deliver prosperity - it is considered questionable if this objective has been achieved. The report confronts the structure of modern economies and argues for a different kind of growth as well as for a societal and institutional transformation. 'Green growth' is considered as first step towards this transformation, but more is required to fully achieve it. The report also argues for environmental and social limits to economic growth and a change in the consumer culture of Western societies.

	UNEP: Global Economy Initiative	OECD: Work on Green Growth	EU: "Europe 2020" strategy	Austria: 'Growth in Transition'	Ireland: Smart Economy Strategy	UK: 'Prosperity without Growth'
Objectives and topics	GEI: aims to achieve low-carbon economy by refocusing policies and investments into (-) clean technologies (-) renewable energy (-) water services (-) green transportation (-) waste management (-) green buildings (-) sustainable agriculture and forests The GGDN aims to revive the world economy (as consequence of the economic crisis) by focusing on similar topics.	The main objective it to achieve an efficient shift towards a sustainable world economy. This should be achieved by stimulus packages and new green investments (short-term) as well as the development of environmentally-friendly infrastructures (long-term). Potential priority areas of the GGS are: (-) climate change (-) poverty reduction (-) sustainable resource management (-) sustainable consumption and production (-) energy security (-) education (-) governance	"Europe 2020" aims to achieve smart, sustainable and inclusive growth: (-) Smart growth: strengthening knowledge and innovation as drivers for future growth (R&D spending, education and training, digital society). (-) Sustainable growth: building a resource efficient, sustainable and competitive economy (improving competitiveness, tackling climate change, energy efficiency). (-) Inclusive growth: empowering people through increased employment and skills, modernising labour markets, fighting poverty. To achieve the priorities, five headline indicators are suggested.	The initiative aims to raise awareness among policy-makers and the stakeholder community on linking economic growth and sustainable development. A more qualitative growth should be achieved and the initiative aims to foster dialogue on how the transformation process towards an economy shaped by sustainable development could be achieved.	The strategy outlines the Irish Government's vision to acknowledge severe short-term economic challenges while focusing on how to achieve a sustainable economy in the medium-term. For this vision, the strategy sets out five action areas: (1) Securing the enterprise economy (2) Building the ideas economy - establishing 'The Innovation Island' (3) Enhancing the environment and securing energy supplied (4) Investing in critical infrastructure (5) Efficient and effective public services and smart regulation	The report presents 12 steps for moving towards a sustainable economy. The steps are divided into three categories: (1) Building a sustainable macro-economy (e.g. investing in public assets and infrastructure, reform of macro-economic accounting, etc.) (2) Protecting capabilities for flourishing (e.g. equality, work-life balance, strengthening human and social capital, etc.) (3) Respecting ecological limits (e.g. resource/emission caps, fiscal reform for sustainability, etc.)
Governance mechanisms & implementation tools	UNEP has established a network approach and collaborates with national governments, NGOs, businesses, consumer groups, experts, etc. The GEI uses soft policy tools, e.g. advisory service, research products and partnerships (with national governments and other stakeholders). The GGND specifically addresses the G20 countries.	The GGS intends to include implementation prescriptions for the international and national level. For better coordination between the different levels, various policy instruments will be used. Generally, the GGS will serve as a policy framework for national policies. Implementation at the national level will be monitored by peer reviews, green growth indicators and sharing of best practices (i.e. Open Method of Coordination).	The proposed governance architecture for implementing the strategy are built on two issues:(-) Thematic approach: focus on the three priorities and five headline targets - actions on EU and Member States level necessary.(-) Country reporting: supporting Member States to define and implement to significant macro-economic and public finance goals.A set of integrated guidelines and policy recommendations (to Member States) should coordinate implementation efforts.All institutions on the different levels (EU, national and sub-national) are called for cooperation to achieve the strategy objectives.	"Growth in Transition" is an initiative that aims to foster discussion and awareness among all stakeholders. No concrete governance mechanisms and policy tools have been developed yet.	The Prime Minister's Office is coordinating the implementation of the strategy. Generally, the actions outlined in the Smart Economy Strategy have been linked to the current Programme of Government. Policy integration is considered an important element and each national ministry needs to report regularly on progress towards the strategy's key actions. Moreover, a task force has been established in the Prime Minister's Office to help in implementing the strategy (with members from ministries, businesses and academia). The policy tools to be applied in implementation are a mix of hard and soft tools, e.g. regulation, economic incentives, new action plans and institutional arrangements.	The report has been sent to UK Government ministries and stakeholders alike to generate discussion (the SD Commission can only give advice).The "Prosperity without Growth" reports includes proposals for governance measures and implementation tools: (-) Economic policy tools (e.g. taxing resources consumption and emissions, etc.) (-) Changes in domestic policies (e.g. improving work-life balance, reducing mobility for work, training for green jobs, etc.) (-) Establishing a global technology fund (e.g. investments in renewable energy, energy efficiency, etc.)

Conclusions

All strategies, initiatives and activities presented in this case study can be seen as a direct response to the recent financial and economic crisis and aim to address environmental and social issues in the context of economic development trajectories. Although different in their specific focus and actual status in the policy-making process, all but the OECD's work on green growth were developed with the involvement of various stakeholder groups (e.g. through a consultation process or through conferences, workshops, etc.). The OECD's Green Green Growth Strategy will be developed internally by committees and directorates.

The understanding of growth and its relation to sustainable development vary among the six strategies, initiatives and activities outlined. On the one hand, the UNEP's Green Economy Initiative, the OECD's work on green growth and the "Europe 2020" communication by the European Commission remain within traditional economic growth paths. Nevertheless, the economic growth approach should be enriched by more environmental and social considerations. They argue for more investments in green technologies and innovations, an increased use of renewable energy resources, higher efficiency in resource use and decoupling. On the other hand, the national strategies, initiatives and activities question, to a varying degree, traditional economic growth. The Smart Economy Strategy in Ireland points towards a more qualitative growth and questions the infinite growth paradigm of Western societies. The Austrian "Growth in Transition" initiative and the "Prosperity without Growth" report of the UK Sustainable Development Commission argue for more qualitative growth that comprises quality-of-life issues and human well-being; "green growth" is considered a first step towards a sustainable economy but more would be required to fully achieve it.

The objectives and topics covered in the strategies, initiatives and activities are broad but focus, as mentioned above, on linking economic growth and sustainable development by increasingly addressing environmental and social issues. The most frequently mentioned topics are actions to tackle climate change, renewable energy use and energy efficiency as well as green technologies and innovations. Moreover, reference is often made to effective governance mechanisms and public services.

The governance mechanisms and policy tools for implementation vary, of course, with regard to the responsibilities of the institution that initiated the strategy, initiative or activity and their status in the policy-making process. The mechanisms and tools range from a network approach with soft policy tools (UNEP) and a policy framework for national policies with peer reviews, indicators and sharing of best practices (OECD) to high-level policy strategies with clearly defined reporting schemes (EU and Ireland). The "Growth in Transition" initiative has not yet developed governance mechanisms and policy tools and the "Prosperity without Growth" report makes general proposals as part of the advisory role of the UK Sustainable Development Commission.

References

Baumgärnter, S. & Quaas, M. (2010) "What is sustainability economics?", *Ecological Economics*, 69 (3), pp. 445-450.

Baumol, W.J. et al (2007) Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity, New Haven: Yale University Press.

Daly, H. (1996) Beyond Growth: The Economics of Sustainable Development, Boston: Beacon Press.

European Commission (2010a) Lisbon Strategy evaluation document, SEC (2010) 114 final, 2.2.2010, http://ec.europa.eu/growthandjobs/pdf/lisbon_strategy_evaluation_en.pdf.

European Commission (2010b) Europe 2020 – public consultation: Overview of responses, SEC (2010), http://ec.europa.eu/eu2020/pdf/overview_responses.pdf.

European Commission (2010c) Europe 2020 – A strategy for smart, sustainable and inclusive growht, COM (2010) 2020, http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf.

European Commission (2009) Consultation on the future "EU 2020" Strategy, COM (2009) 647 final, http://ec.europa.eu/dgs/secretariat_general/eu2020/docs/com_2009_647_en.pdf.

European Council (2000) Presidency Conclusions, Lisbon European Council, 23-24 March 2000, http://www.europarl.europa.eu/summits/lis1_en.htm.

Government of Ireland (2008) Building Ireland's Smart Economy: A Framework for Sustainable Economic Renewal, www.taoiseach.gov.ie/eng/Building_Ireland's_Smart_Economy/Building_Ireland's_Smart_Economy_.pdf.

Martinez-Alier, J. (2009) "Socially Sustainable Economic De-growth", *Development and Change*, 40 (6), pp. 1099-1119.

OECD (2009a) OECD Declaration on Green Growth, C/MIN(2009)5/ADD1/FINAL, adopted at the Council Meeting at Ministerial level on 25 June 2009 http://www.olis.oecd.org/olis/2009doc.nsf/LinkTo/NT00004886/$FILE/JT03267277.PDF.

OECD, (2009b) Issues Paper/Discussion questions: Green Growth and Sustainable Development. Paper for the OECD Conference Centre Paris. SG/SD(2009)1

OECD (2009c) OECD and Green Growth, OECD Brochure, http://www.oecd.org/dataoecd/42/28/44273385.pdf.

OECD (2008) 2008 Annual Report on Sustainable Development Work in the OECD, http://www.oecd.org/dataoecd/61/32/42177377.pdf.

Rapp Nilsen, H. (2010) "The joint discourse 'reflexive sustainable development – From weak towards strong sustainable development", *Ecological Economics*, 69 (3), pp. 495-501.

Rodrik D. (2008), One Economics, Many Recipes: Globalisation, Institutions and Economic, Princeton: University Press.

Schäfer, A. (2006) A new form of governance? Comparing the open method of co-ordination to multilateral surveillance by the IMF and the OECD*", Journal of European Public Policy*, 13 (1), pp. 70-88.

SDC (Sustainable Development Commission) (2009) Prosperity without Growth? The transition to a sustainable economy, UK Sustainable Development Commission, http://www.sd-commission.org.uk/publications/downloads/prosperity_without_growth_report.pdf.

Sedlacko, M. & Gjoksi, N. (2009) "Sustainable development and economic growth: Overview and reflections on initiatives in Europe and beyond", *ESDN Quarterly Report*, December 2009, http://www.sd-network.eu/?k=quarterly%20reports.

Spangenberg, J. et al (2002) "Sustainable Growth Criteria: Minimum benchmarks and scenarios for employment and the environment", *Ecological Economics*, 42 (3) , pp. 429-443.

UNEP (2009a) Global Green New Deal: Policy Brief, March 2009, http://www.unep.org/pdf/A_Global_Green_New_Deal_Policy_Brief.pdf.

UNEP (2009b) Global Green New Deal: An Update for the G20 Pittsburgh Summit, September 2009, http://www.unep.org/greeneconomy/LinkClick.aspx?fileticket=ciH9RD7XHwc%3d&tabid=1371&language=en-US.