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# TAKEAWAY FOR THE NETHERLANDS

- Given that climate change and resource efficiency is a threat for the Dutch economy and its competitiveness, a leading role by government is needed.
- Although a transition towards a climate friendly society cannot be reached without societal actors, this transition can not only rely on voluntary agreements and also needs financial incentives and law.
- The role of the citizens should get more attention in the whole policy framework for resource and energy efficiency.
- For a real energy transition, particular after 2020, Dutch society needs an evidence based societal discussions on the facts about who is paying what costs for renewable energy, who profits and what are the societal gains.

# **EUROPE 2020: TOWARDS GROWTH AND RESOURCE EFFICIENCY**

Insights from and for Netherlands

EMPHASIS ON THE FLAGSHIP ON RESOURCE EFFICIENT EUROPE The European Union and its Member States are struggling with challenges concerning the whole Europe such as unemployment, population age structure, education and poverty. Investments in R&D and innovation are also being challenged and being viewed as expenses rather than economy boosters and job preservers. Europe has great economic potential, but faces growing competition as the global economy is recovering.

DECOUPLING ECONOMIC GROWTH FROM THE USE OF RESOURCES The Europe 2020 strategy addresses smart, sustainable and inclusive growth. It accounts for the 28 European Union Member States and is important for candidate and potential candidate countries as well, contributing to a European perspective on growth.

SUPPORTING THE SHIFT TOWARDS A LOW CARBON ECONOMY The use of natural resources has significant impacts on European economy as well as quality of life of its citizens while also having long-term effects on the global scale. The uptake of innovations and technologies put increasing pressure on the use of resources (European Commission 2014b).

INCREASING THE USE OF RENEWABLE ENERGY SOURCES, MODERNISING THE TRANSPORT SECTOR This policy brief addresses the main objectives of the 2020 strategy by putting an emphasis on the Resource-efficient Europe Flagship initiative implemented in the Netherlands. Its focus is to help decouple economic growth from the use of resources, support the shift towards a low carbon economy, increase the use of renewable energy sources, modernise our transport sector and promote energy efficiency.

PROMOTE ENERGY EFFICIENCY

Furthermore, this policy brief looks at how the Europe 2020 strategy policies in the Netherlands relate to sustainable innovation and public participation. The brief compares Europe 2020 policies and initiatives in selected European countries. Then it compares how progress on Europe 2020 in the Netherlands relates to progress in the other countries.

TAKE THE LEAD IN PROCESSES OF GOVERNANCE FOR SUSTAINABLE DEVELOPMENT

Concerning the Netherlands, special attention should be paid to taking the lead in processes of governance for sustainable development given the internationally recognized climate goal which governments ought to pursue. Also the problem of rebound effects have to be addressed.



# Introduction

THE EUROPE 2020 STRATEGY ADDRESSES SMART, SUSTAINABLE AND INCLUSIVE GROWTH

The Europe 2020 strategy addresses smart, sustainable and inclusive growth. It accounts for the 28 European Union Member States and is important for candidate and potential candidate countries as well, contributing to a European perspective on growth. The Member States develop their own strategies concerning sustainable growth and public finances.

TARGETS RELATED TO EMPLOYMENT, INVESTMENTS, GHG REDUCTION, RENEWABLE ENERGY PRODUCTION, ENERGY EFFICIENCY, EDUCATION, RISK OF POVERTY, SOCIAL EXCLUSION The Europe 2020 strategy has integrated guidelines at EU level that combine priorities with targets. These targets include reaching employment at least for 75% of the 20-64 year-olds; invest 3% of the GDP in R&D, reduce GHG emissions by 20% compared to 1990, produce 20% of energy from renewables and increase energy efficiency by 20%, reduce the rates of early school drop outs below 10% aiming at 40% of 30-34-year-olds completing third level education as well as reducing the risk of poverty and social exclusion of 20 million fewer people (European Commission 2014a).

PRIORITIES EXPRESSED IN FORM OF FLAGSHIP INITIATIVES

The priorities are expressed in form of flagship initiatives (TGG 2014):

1. Innovation Union, 2. Youth on the move, 3. Digital agenda for Europe, 4. Resource efficient Europe, 5. Industrial policy for the globalisation era, 6. Agenda for new skills and jobs and 7. European platform against poverty.

UPTAKE OF INNOVATIONS AND TECHNOLOGIES PUT INCREASING PRESSURE ON THE USE OF RESOURCES The use of natural resources has significant impacts on European economy as well as on the quality of life of its citizens while also having long-term effects on the global scale. The uptake of innovations and technologies put increasing pressure on the use of resources (European Commission 2014b). Resource efficiency is a key response to these challenges as it may also boost productivity and competitiveness, lower production costs while promoting European growth and jobs. Using resources more efficiently will help to achieve many of the EU's objectives. It will be of key importance in making progress to deal with climate change and to achieve the target of reducing EU greenhouse gas emissions by 80 to 95% by the year 2050.

RESOURCE EFFICIENT EUROPE FOCUS IS E.G. TO DECOUPLE ECONOMIC GROWTH FROM THE USE OF RESOURCES This policy brief addresses the main objectives of the 2020 strategy by putting an emphasis on the Resource-efficient Europe Flagship initiative. Its focus is to help decouple economic growth from the use of resources, support the shift towards a low carbon economy, increase the use of renewable energy sources, modernise our transport sector and promote energy efficiency.

DUTCH ECONOMY AND RAW MATERIALS

The Dutch economy depends strongly on raw materials. As an open and competitive economy the Netherlands needs a stable supply of raw materials. Apart from its own dependence on basic raw materials, the Netherlands is a major transit route for raw materials. The logistics, imports and export of raw materials are an essential component of the Dutch economy. If we look at the structure of the Dutch industry, the Netherlands is primarily a large-scale importer of semi-manufactured products, and not so much of raw materials as such. The Netherlands has a significant agricultural sector that generates 10% of the country's employment and which is highly dependent on the import of biotic raw materials for human and animal consumption. And many large Dutch multinationals have links with producers of biotic and abiotic raw materials.

ENERGY AND RAW MATERIAL SECURITY

Because of the Dutch dependency on the international movement of raw materials any restriction on a free global market for raw materials could therefore have a direct impact on the Dutch economy.

The Netherlands are a major producer of natural gas and maintains competitive oil-refining and petrochemical industries. Given these two factors and given its geographic position the Netherlands one of Europe's largest hubs in energy trade and support of energy security.

GLOBALISATION AND SUSTAINABILITY

The main purpose of the Dutch foreign policy in relation to the security of supply of raw materials is to maintain a global free trade system. Although Dutch trade, the processing industry and logistics are significant sources of income for the Netherlands there is also the recognition that the Netherlands as an importer of raw materials leave an ecological footprint on the world. Dependence on raw materials also impacts on people, climate, biodiversity and the environment, which in turn can pose a direct threat to the welfare and prosperity in the Netherlands and all the countries along the chain of supply of raw materials.

POLITICAL PRIORITY AND STRATEGY

The problem of raw materials was given priority in the national government coalition agreement and has also received attention in Parliament. But there is no overall integral strategy like in Germany. Starting point is that securing the supply of raw materials is primarily the domain of trade and industry. The Dutch Government can facilitate and stimulate, coordinate initiatives, create frameworks, exploit market processes and where necessary steer processes towards a socially desirable outcome. It also has an important role in raising awareness of the potential threats and opportunities arising from the raw materials issue. If the global the market is not operating optimally, the Dutch Government can try to intervene through appropriate channels (EU, WTO etc.). And in response to business initiatives and in consultation with knowledge institutions and stakeholder organisations if specific opportunities arise Government can make an active contribution.

RAW MATERIALS NATIONAL GOVERNMENT POLICY DOCUMENT

The Raw materials national government policy document is the first move towards an integral Dutch policy on raw materials. It catalogues and harmonizes current polices and puts the main problems and opportunities on the agenda. The policy document also names a number of actions that are already underway or are due to start soon. Further steps are announced to gain more understanding of the problems surrounding raw materials and the role of government in this area. National Government elaborates in this policy document three agenda:

- 1. Secure and increase supply and improve sustainability of supply.
- 2. Limit demand and where possible improve sustainability of demand
- 3. Improve the sustainability and efficiency of raw materials consumption Ad 1. This first agenda is about securing the supply, both in terms of availability as well in improving sustainability of raw materials by seeking new supplies, closing cycles (re-use, recycling) and seeking alternatives for certain materials. It stri

SECURE AND INCREASE SUPPLY AND IMPROVE SUSTAINABILITY OF SUPPLY.

This first agenda is about securing the supply, both in terms of availability as well in improving sustainability of raw materials by seeking new supplies, closing cycles (re-use, recycling) and seeking alternatives for certain materials. It strives to make optimal use of raw materials in the Netherlands and the EU to reduce dependence on raw materials from outside the EU. Dutch government itself, and through the EU channels, wants to promote international stability and increase transparency of internal material flows.

LIMIT DEMAND AND WHERE POSSIBLE IMPROVE SUSTAINABILITY OF DEMAND

Within the demand agenda the Dutch government wants to restrict national demand for raw materials and make it more sustainable. With its own public purchasing policy and operational management the government wants to encourage efficient, sustainable and innovative use and re-use of raw materials. Futher is wants to stimulate that sustainability standards are developed in the EU context. Because the current organisation of the market is not sufficiently geared to long-term prosperity. And the environmental effects of production and over-exploitation are not adequately reflected in the price.

IMPROVE THE SUSTAINABILITY AND EFFICIENCY OF RAW MATERIALS CONSUMPTION The third agenda is to improve the efficiency and sustainability of raw materials consumption within the Dutch economy by transforming raw materials chains, promoting market operation aimed at sustainable security of raw materials and more intelligent design of processes and products.

ENERGY AGREEMENT

On the basis of the before mention national government coalition agreement the Netherlands reached in September 2013 a society-wide Energy Agreement for Sustainable Growth. This agreement is laying out the societal energy actions needed for the 2020 horizon. The agreement relies on the Dutch polder model and the Social and Economic Council of the Netherlands (SER), an advisory and consultative body representing employers, trade unions and independent experts, took the lead. They acted as a platform and facilitated a consensus-driven and bottom-up decision-making process on the future of energy. The agreement unites divergent interests and brings together more than forty organisations, including central, regional and local government, employers' associations and unions, nature conservation and environmental organisations, and other civil-society organisations and financial institutions.

GOALS OF THE ENERGY AGREEMENT

he agreement aims to align the interests of industry, civil society and government towards the key objectives of sustainable and secure energy supply, industrial competitiveness and affordability of energy for the consumers. The Agreement shows a strong consensus on the benefits from double planned strategy. At the one hand it plans energy efficiency savings to 1.5% from the country's final energy consumption by 2020. And at the other side it deploys strategies for more renewable energies (14% by 2020 and 16% by 2023). Key actions are that the agreement promotes sustainable energy at local level, network investment and a strong EU Emissions Trading Scheme. It also supports the transition to clean coal and carbon capture and storage technologies, energy savings and emissions reductions in transport, and the commercialisation of clean technologies, while stimulating employment and training. National government has reserved public budget resources for the implementation.

PROMOTING SUSTAINABILITY AT THE FRONT OF THE CHAIN

A circular economy reuses products and raw materials and conserves natural resources. Products are made and marketed in a way that makes them fit perfectly into a circular economy. The creation of closed natural cycles is also promoted. Therefore, Dutch government is pursuing to ensure the circular design of products and close local and global cycles.

MAKING CONSUMPTION
PATTERNS MORE SUSTAINABLE

To accelerate the transition to a circular economy, it is important for members of the public to start consuming sustainably. As a major purchaser, the national government also has a possibility to use its purchasing power to speed up the transition.

IMPROVING WASTE SEPARATION AND COLLECTION AND FOCUSING EXISTING WASTE POLICY ON A CIRCULAR ECONOMY In a circular economy there is no waste. The Dutch government's ambition is to minimise the volume of recyclable materials ending up in incineration plants. For this the separation of waste, particularly at the source, is a precondition. The goal of waste policy must be to reuse materials. Legislation should not obstruct this goal.

ADOPTING AN APPROACH TO SPECIFIC MATERIAL CHAINS AND WASTE STREAMS Central government will stimulate and facilitate the process of making specific value chains sustainable. By facilitating consultations between chain parties, enabling them to formulate joint goals and by defining what they need from each other in order to achieve those goals.

DEVELOPING FINANCIAL AND OTHER MARKET INCENTIVES

To close material chains and reduce the burden on the environment, it is important for financial incentives to stimulate circularity. But unless there are good business cases that demonstrate the opportunities for a circular economy, these will not be seized by the market.

CONNECTING KNOWLEDGE AND EDUCATION TO THE CIRCULAR ECONOMY AND SIMPLIFYING MEASUREMENT METHODS, INDICATORS AND CERTIFICATION LABELS

The transition to a circular economy requires system innovation, including technical innovation as well as institutional and cultural changes. This programme seeks to promote the development and sharing of knowledge in the field of the circular economy. Criteria, assessment methods, indicators and quality labels provide transparency. They can help consumers, companies and policymakers to make informed choices.

### INSIGHTS FROM EUROPEAN POLICY ACTIONS

PROGRESS DESPITE SLOW GROWTH

The slow growth of the European economy sets the background for sustainable innovation and public participation in it in Europe. Sustainability, however, transcends economic cycles, which becomes evident in how differently challenges relating to CO2 emission reductions, energy security and resource intensity have been responded to in the studied European countries.

CO2: STRATEGIES, PROGRAMMES AND OPERATIONS

Three levels of CO2 policies emerge in the examples: strategic, programmatic and operational. In many countries, reductions in CO2 emissions are still being discussed in terms of national strategies, i.e. approaches to address reductions in emissions. In several countries, these discussions have led to programmatic policies such as financial institutions, funding arrangements and incentives designed to reduce emissions. There are, furthermore, operational activities especially in the field of transport which fulfil the strategies and programmes. While all three levels of CO2-policies in the studied countries reflect varying degrees of maturity, it appears that public participation appears of low priority in them.

**ENERGY SECURITY EMBEDDED** 

Energy security is more systemically embedded in terms of sustainability and public participation. Energy security policies distinguished in the studied countries were very often interlinked to other energy policy targets such as energy efficiency, resource intensity and clean energy production. In many cases, energy security per se was most readily recognizable in operational activities such as terminals and energy reserves providing diversification of fuel sources. Public participation in energy security operations often takes place through representative democratic procedure and is combined with public acceptance or lack thereof.

RESOURCE INTENSITY PROVIDES BUSINESS OPPORTUNITIES

Resource intensity currently draws business attention in the studied policies. Market based policy tools such as joint purchases and offerings are prevalent in the cases. Waste management is seen as a provider of resources in the spirit of circular economy. Energy and building efficiency are also considered of interest. In these contexts, public participation takes form through activities of consumers and citizens.

MULTIFACETED VIEW

Accordingly, studied policies relating to flagship initiative on resource efficient Europe provide a multifaceted view on current responses to how challenges are met in European countries. Policies in these countries on CO2 emission reductions, energy security and resource intensity form three distinct approaches. CO2 emission reductions are addressed on strategic, programmatic and operational levels, depending on maturity of policy context. Energy security, in turn, is interlinked to a variety of parallel policy targets. Market related policy instruments appear more frequent concerning resource intensity, in contrast. Public participation also comes forth in different ways in the three policy domains.

# THE NETHERLANDS IN EUROPEAN PERSPECTIVE

The Dutch economy is one of the European countries that depends the strongest on the import of raw materials or half products for it's on production and consumption, and being a major transit route for raw materials is also very important for the Dutch economy. So compared with other European countries, polices to deal with the global scarcity of raw materials have been on the political agenda since 2008 when a Interdepartmental working group Scarcity and Transition was formed. Since then a lot of policy has been developed but there is still a lack of coherence between the policies of the departments involved. For instance there are doubts that the agenda of climate change and resource efficiency are really integrated. There are several attempts to come to more integral framework but there still seems to be a lack of coherency and the Netherlands do not reach the level of integration some of the forerunners in Europe, like Germany, have.

One of the complicating factors is that the Dutch government does not want to be to intervene to much in the free market. It is not that the issue of the resource efficiency is completely left to the free market. Government plays a facilitating and supportive role. International, the Netherlands as an open economy are among the strongest for fighter for a free market on raw materials, so having a strong intervenient and protective position on the own Dutch market would be unlogical. There is the expectation that driven by rising commodity prices, scarce natural resources and other strategic motives like consumer demands, Dutch producers will be increasingly aware how critical material flows are for their processes and will try to strengthen the grip on these material streams.

If we look to the result of the Dutch policies as monitored by the Dutch Central Bureau of Statistics overall the environmental efficiency indicators for emissions and waste improved have improved. There is absolute decoupling which means that although GDP increased, for example the emissions of greenhouse gases have decreased. All indicators for resource use efficiency show that fewer resources are required to generate an equal amount of value added. However, the absolute level of most resources needed is still increasing (relative decoupling). For example, energy use and domestic use of biomass, inorganic minerals and metals for economic production are still rising, but less than the GDP growth rate. According to the CBS internationally, the Netherlands scores averagely for resource efficiency. So although the environmental efficiency within the Netherlands has improved significantly, the international position of the Netherlands is still average compared to other EU countries. Particular the percentage of renewable energy production that increased is still very low compared to other countries.

More and more companies are aware of problems with resource efficiency in the future. There are innovative examples of Dutch manufacturing companies with systems to recover their own products to process raw material. Additionally more and more companies adapt their production methods so that the materials used can be recycled into new raw material. And this of course is also economically very attractive and the eco-innovation makes the Dutch economy stronger. In the group of forerunner companies the SMEs are underrepresented.

THE DUTCH PATHWAY

**RESULTS** 

# RECOMMENDATIONS FOR POLICYMAKERS IN THE NETHERLANDS

There are Dutch policies in place to reach all the multiple policy objectives of the Resource-Efficient Europe flagship initiative. But although the components of an integrated resource efficiency policy framework are there such a framework is not there.

Although interventionist policies in the context of Dutch resource-efficient does not fit with either the flagship initiative or the Dutch position on an international free market for natural resources, not all goals can be reached with only spontaneous actions by societal actors. Dutch Government needs to take the lead in processes of governance for sustainable development given the internationally recognized climate goal which governments ought to pursue.

The role of Dutch Government as a guide for sustainable development is reduced both internationally and nationally. Internationally because the Netherlands is not "on track" with targets for energy efficiency, CO2 reduction and renewable energy. Nationally there is the criticism that sustainability does not appear to be a top priority for politicians. Business leaders and Dutch multinationals (like Unilever, Philips, DSM, Ahold) pull their own plan and seem to pass government in ambitions and actions. SMEs (60% of the Dutch economy) are lacking behind and have difficulties in following the megatrends in the worlds. There are many uncertainties in the free market. Given that climate change and resource efficiency is a threat of the continuity of companies and economic sectors (in terms of raw materials, supply chain, marketing) and it leads to rising costs and loss of competitiveness, a leading role by government is needed for the economic pillar of sustainable development.

If we look at the roadmap towards the goals of the flagship initiatives the Netherlands are doing very well on the aspect of enhancing the dialogue and actively involving societal stakeholders in the implementation of the EU flagship initiative goals. Particular the Energy agreement and the green Deals have to be mentioned here

But there is also criticism possible on the Dutch culture of voluntary agreements and green deals with societal actors. Green Deals are fragmented across themes, sectors and a general criticism on the effect of voluntary agreements is their added value on already existing autonomous developments.

A major criticism on the Energy Agreement is that, although everybody will agree that a transition cannot be reached without societal actors, it does not lead to a revolution or real transition. It addresses the existing European commitments for 2020 but does no look ahead to the following years. A sprint race towards 2020 is not enough and does not shape the energy transition after 2020. What it does bring is a more stable investment climate. The almost annual changing political support for green energy is deadly for a stable investment climate in renewable energy. But it also has the character of compromises that might have side effects that need to be addressed.

THE ROLE OF DUTCH GOVERNEMENT

STRONGER CARROTS AND STICKS AND EVIDENCE BASED DISCUSSIONS SIDE EFFECT OF THE ENERGY AGREEMENT

MORE POTENTIAL IMPROVEMENTS

One side effects is that given the compromise character the agreement potentially undermines the criterion of polluter pays. Further the innovative chance the Netherlands have with wind at sea gets a lot of societal resistance. In general there is a lot of resistance against the societal costs of the energy agreement. The European Commission Authorities wants member states to be reluctant with tax cuts for citizens and businesses that generate green energy. Such discounts are however an important pillar of the Energy agreement and the creation of more renewable energy. And there is also the fear that the environmental movement now in any discussion about more climate is confronted with the Energy agreement. What is crucial for dealing with these side effects is a discussion based on facts about who is paying what costs for renewable energy, who profits and what are the societal gains. Not in terms of only ecological sustainable goals but also in terms of jobs.

The role of the citizens is also important and should get more attention in the whole policy framework. The awareness about sustainability is increasing among consumers. On the one hand this gives more possibilities for behavioral change, But we also see more influence of consumers on companies and pension funds asking them not to invest in fossil fuel. The educational system can help to stimulate of more sustainable (resource-efficient) lifestyles by creating more knowledge and more awareness. and deliver more knowledge workers on resource efficiency; resource efficiency needs to be integrated. Although fiscal greening is relatively well advanced in the Netherlands.

Boosting economic performance while reducing resource use and new opportunities for economic growth and greater innovation are important goals of the flagship initiative. In the Netherlands there is more room for putting more emphasis on resource-saving innovations. Not just on including green technology domains but as a criterion in all assessment procedures for proposed research and investment activities.

Also the problem of rebound effects have to be addressed. Through improvements in resource efficiency, the production and use of goods and services, however, also become cheaper, making the demand increases. That may be the savings on energy and other natural resources partly destroy again. This effect is known as the 'rebound effect'. The direct rebound effect – more demand for a product or service because of falling prices – is higher as the income is lower and comes most strongly evident in countries with a lower income level. In the longer term, at the market saturation and at higher incomes the importance of indirect rebound effects: the money saved by lower prices in the long run to other products or services is issued, which in turn lead to environmental impacts and seizure of natural resources lay.

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### **CASI Project Description**

PROJECT TITLE: Public Participation in Developing a Common Framework for Assessment and Management of

Sustainable Innovation (CASI)

COORDINATOR: ARC Fund, Bulgaria: Zoya Damianova.

CONSORTIUM: The CASI consortium consists of 19 partners representing 12 European countries. Country correspondents extend the reach to 28 countries.

FUNDING SCHEME: Coordination and support action, funded under the 7th Framework Programme of the European

Community, SCIENCE-IN-SOCIETY-2013.1.2-1.

DURATION: 42 months, 1/2014-6/2017 BUDGET: 4.5 M€, 428 person months

WEBSITE: www.CASI2020.eu

REFERENCE: Coenen, Frans, Matschoss, Kaisa; Repo, Petteri; Tregner-Mlinaric, Anita (2014). CASI Policy brief: EUROPE 2020: Towards growth and resource efficiency, Insights from and for The Netherlands. www.CASI2020.eu

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# Appendix 1 EUROPE 2020: TOWARDS GROWTH AND RESOURCE EFFICIENCY in selected countries.

Policy name	Description	Sustainability	Public participation	Observation
AUSTRIA				
Supplying the Austrian Federal Railways with green energy	Decreasing CO2 emissions of the Austrian Federal Railways	92.5 % of energy supply comes from CO2 free resources	Nothing special	In terms of CO2 emissions, Austrian Federal Railways are among the cleanest mobility providers in Europe
Austrian Green Building Star	Award for green tech buildings built with Austrian knowledge outside of Austria	Austria is one of the leaders in green tech building know-how world-wide	Starting phase, no info	This is partly a marketing campaign
"Sag's am Mehrweg" reusable bottles/beverages packaging initiative	Raise awareness for reusable beverages packaging	Reusable beverages packaging is a good contribution to energy efficiency and resource intensity	Large image campaign using social media etc.	Good image/marketing campaign, however, strict legal regulation perhaps would be a lot more efficient
BELGIUM				
Time-differentiated road pricing	targeting peak hour congestion and GHG emissions coming from the road transport sector	sustainability from economic (cost of dayly traffic jams, cost of maintaining roads) and environmental (reducing GHG emissions from the road transport sector by making citizens aware of the cost of driving cars) perspective	Citizens of Belgium participated in the pilot project. If the measure will be implemented, citizens will have a board computer in their car.	Taxes on cars and road transport will be shifted towards environmental taxation.
Flanders' Materials Programme	Policy programme of the Flemish government that supports the transition towards a circular economy through long-term vision development, policy-relevant research and concrete actions.	sustainability from environmental perspective (sustainable materials management)	multi-stakeholder cooperation: a self-learning network around sustainable materials management involving researchers, policy-makers, civil society organisations and businesses.	Policy that adopts a systemic approach: reorienting waste policy towards a sustainable materials policy and stimulating a transformation of the waste system.
Group purchase of solar PV in the province of Antwerp	The city of Antwerp coordinates the group purchase of solar PV: 3.332 households invested in solar panels.	sustainability from environmental (investing in renewable energy) and social (assisting citizens in purchasing solar panels) perspective	citizens subscribed to the group purchase and acitively participated in investing in renewable energy and local production capacity.	Investments in local production capacity could solve the domestic generation problems in the short term. The 'energy pact' that is currently on the negotiation table aims at introducting a new energy policy with a long term vision.
BULGARIA				

Policy name	Description	Sustainability	Public participation	Observation
National Plan for Waste Management for the period 2014 - 2020	The plan's major objective is to establish a framework for waste management, which should reduce environmental impacts of waste, improve the effectiveness of used resources, increase the responsibility of those who dispose waste, and stimulate the investments in waste management.			
Energy Strategy of the Republic of Bulgaria till 2020 for reliable, efficient and cleaner energy	The main objective of the Strategy is to achieve a high-tech, secure and reliable energy system, based on advanced technologies, which meets the European criteria and at the same time makes the most of the available resources in Bulgaria and protects Bulgarian customers. To attain this objective, the following priorities were set in the Energy Strategy: securing the energy supply; reaching the targets of renewable energy; increasing the energy efficiency; developing a competitive energy market and policy aimed at making energy available and accessible for the Bulgarian citizens.	Sustainable energy development has a special focus in the Strategy and is related to some of the long-term national targets, set in the context of the Europe2020 Strategy, namely: - 20% reduction of the greenhouse gas emissions compared to 1990; - 20% share of renewables in the overall energy mix and 10% share of renewable energy in transport; - improving energy efficiency by 20%.	One of the criticisms towards the Strategy is that it does not consider possible public engagement in the formulation and implementation of energy policies.	
CROATIA				
Low-carbon development strategy until 2030 / 2050	In April 2015, the government has announced the plan for developing Low-carbon development strategy until 2030/ 2050. That will be the basic policy document dealing with climate change mitigation and integrating economic, developmental and environmental considerations.	The initiative is expected to contribute to sustainability, but its development and implementation are likely to be complex.	The level of public participation is expected to be high - most participants are likely to be experts and NGOs. Enterprises and their associations are less likely to be show interest and involvement.	
LNG Terminal Krk	LNG Croatia as a company established for the purpose of building and operating the infrastructure necessary for receiving, storing and regasifying liquid natural gas. The project is currently being prepared.	The project is expected to be environmentally sustainable, but its economic sustainability will depend upon parameters which are still unknown (e.g. price of gas and other energy sources, competition etc.).	The public is involved to some extent in the discussions related to the project. The project has a relatively broad public support, but there are are also occasional criticisms related to its economic performance (e.g. related to investment costs, future demand and prices) and environmental risks (e.g. ballast water discharge in the Adriatic).	

Policy name	Description	Sustainability	Public participation	Observation
Co-financing of electric and hybrid vehicles	The government provides subsidies for purchases of different types of electric and hybrid vehicles, which can be used by companies and citizens.	The initiative contributes to sustainability, although its effects may be relatively small at the beginning.	The public was not directly involved in the design of this policy measure, but the measure is mostly viewed positively. There are some criticisms related to the fact that public money is used to co-finance imported vehicles.	
CYPRUS				
The low-carbon development strategy of Cyprus	This Strategy is the first long term low-carbon development strategy that the government of the Republic of Cyprus has ever adopted. It is conceived as a framework for action and government involvement in low-carbon development. The Strategy will be kept under review in view of new scientific knowledge, developments in international co-operation to combat climate change, and governmental emphases.	Cyprus is setting, through this strategy appropriate additional policies and measures. This long-term target is set as an ambitious goal at which Cyprus should aim, but one which requires systematic measures over the next few decades in order to reduce net GHG emissions. It is based on the need to reduce GHG emissions significantly on a global scale over the next several decades, which has been clearly laid out by the assessments of the Intergovernmental Panel on Climate Change	This Strategy addresses primarily the measures that Cyprus will adopt in order to combat human-induced climate change and to fulfil its obligations. It is clear, however, that such measures will be of limited value if there is no general awareness of the subject and if the general public is not willing to participate in achieving the set targets. The government must work with industry and non-governmental organisations in order to mobilise the public (with educational materials) so that the goals can be achieved.	The discussion of climate change, both at international and national level, has become more serious in the light of new and better scientific knowledge. I
The maintenance of Petroleum stock Law of 2003	Is based on European Directive 414/68. The law defines the establishment of the Cyprus Organization of Petroleum Stock Management and the quantities of stocks should exist as regards: a) petrol fuel, b) gas oil, diesel oil, kerosene and kerosene type jet fuel and (c) fuel oil.			

Policy name	Description	Sustainability	Public participation	Observation
National Strategy for sustainable development	The strategy includes ten thematic sections; specifically include objectives and actions on climate change, sustainable transport, sustainable consumption and production, conservation and management of natural resources, public health, social inclusion, global challenges, urban development, sustainable tourism, education and research, technology and innovation. Through the strategy reference is made to the state of the art, the challenges, the objectives and the actions needed for their implementation	The ultimate goal of the strategic is to achieve a sustainable development. Through sustainable development aims to improve the conditions of human life, while preserving the environment in the short and especially long term.	For each section of the strategy, actions were defined for achieving the objectives. For those actions basic requirement is the participation of the public.	
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CZECH REPUBLIC				
The New Green Savings Programme	Proposed within the National Reform Programme of the Czech Republic 2013	Touches on all three aspects of sustainability - environmental, social and economic.	Public participate through applying for subsidies	
The Secondary Raw Materials Strategy of the Czech Republic		Mainly environmental through decrease of energy and material intensity, and consequently lower emissions.	Public would participate in the implementation stage of the policy through active recycling.	
National Reform Programme of the Czech Republic 2013	Represents national targets within the framework of Europe 2020 strategy.	Covers all three aspects of sustainability i.e. environmental, social and economic.	Public comments and suggestions were integrated and reflected in the final version of the Programme.	
DENMARK				

Policy name	Description	Sustainability	Public participation	Observation
Moon Pig	A public-private partnership focusing on bringing down emissions from pig production. The project is in two phases; (1) develop technologies improving the pig production – presented through a model barn, (2) develop ideas for future legislation focusing on emission output rather than input.	The sustainability prospects are large since the Danish agricultural production is a major emitter of greenhouse gasses.	Stakeholders have been included in the project right from the start. Furthermore are a number of CSOs (as well as governmental agencies, research institutes and representatives of industry) direct partners.	A major focus of the project is to develop measurement technologies to quantify the expected advances. While animal welfare has always been an important aspect of the project, this aspect have been focused upon recently, why the project has been extended by a year.
Amager Hill	A waste-to-energy combined heat and power plant being built in Copenhagen, Denmark. The plant, designed by the Danish architects BIG, will have a number of recreational activities, including a ski slope!	By achieving state of the art efficiency, the plant is expected to lower the emissions of CO2 by 100.000 tons a year when comparing with the current plant.	While the public has not been part of the construction process, they have certainly been given thoughts in the design process. Further is possible to participate in a tour of the construction site and hear about the thoughts that have been put into the design of the plant.	Due to the recreational ambitions of the design of the plant, the owner expects the plant to become an attraction for Copenhagen. Further can the attractiveness of the integration into the cityscape be seen as a consideration of the problem of "not-in-my-backyard"-mentality these types of projects often are faced with.
Samsoe - Renewable Energy Island	A national competition in 1997 appointing Denmark's first Renewable Energy Island, led to that Samsoe, a minor island with fewer than 4.000 inhabitants, started on a journey towards CO2 neutrality.	The small municipality succeeded in becoming CO2 neutral and is today selling renewable energy the equivalent of 10 % of their consumption.	The citizen of Samsoe has been an important part of the entire process right from the start. This includes the planning of and development work including the choice of technologies. Furthermore are the citizens the main investors in the project.	Through the project, Samsoe have received a lot of attention both national and internationally. This interest include tourists and foreign policymakers who look to Samsoe and the project as a source of inspiration.
ESTONIA				
Estonian Transport Development Plan for 2014-20	The plan outlines the general goals of the Estonian transport system and its management such as promoting resource efficient and environmentally friendly means of transport, curbing the use of fossil fuels and improving the country's rail and air connectivity. All the aforementioned goals should significantly contribute to the curbing of CO2 emissions.	The Plan outlines the strategies for the sustainable development of transport in Estonia and the most sustainable means of achieving it.	The Plan was developed jointly with ministries, local governments and the first and third sector.	

Policy name	Description	Sustainability	Public participation	Observation
Baltic-connector and the LNG terminal	Constructing liquefied gas (LNG) terminals in both countries by 2019 and thereby reducing both countries' dependence on Russian gas and contributing to energy security, security of supply and stable prices.	The Baltic-connector pipeline will provide a sustainable mean of energy distribution and will result in stable and sustainable prices for the end-user. It will also contribute to the development of a more sustainable energy industry, especially when considering the serious drawbacks of oil shale mining as is the current practice in Estonia.	The pipeline was devised jointly with the Finnish and Estonian governments with the interests of end-users in mind.	
Iru waste to energy recycling and power plant	Iru incineration unit produces heat and electricity from common household waste, preventing the accumulation of waste in landfills, contributing to the diversification of energy sources and providing better fees and prices for end-users.	The waste collection fees are lower than the charges at landfills and the heat price is more stable and lower than that of heat generated from gas or biomass.	N/A	
FINLAND				
Finnish Energy and Climate Strategy from 2013	The long-term goal of the strategy is the creation of a carbon-neutral society in Finland. Key objectives of the strategy are the achievement of the national targets set for 2020 and the preparation of a pathway towards meeting the long-term energy and climate objectives set by the EU.	The strategy has an emphasis in the environmental sustainability, but as it also follows the development for example of consumers and clean technology business it also takes into account the social and economic dimensions of sustainability.	Resulting from the strategy is the Climate Act that brings climate policies regularly to be discussed in the Finnish parliament. This enables the participation of the public through representatives. There are no measures directed to direct public participation in the strategy.	
LNG terminal and gas pipeline between Finland and Estonia	The aim of the programme is to connect the Baltic countries' and Finland's natural gas network to the European network and to construct a LNG terminal on the coast of the Gulf of Finland, which would serve Finland and the neighbouring Baltic countries.	Sustainability in this policy implementation emerges only indirectly through marginal improvement of the CO2 balance of the total energy use in Finland: natural gas produces less emissions if it replaces for example coal or peat in energy production.	This is upstream high-level initiative that does not envisage any public participation.	Finland's energy security policy is more focused on large scale industry projects rather than small scale local activities. Local scale activities such as the support on micro-energy creation would enable increased public participation and improved energy security. Finland's strategy is, however, to aim for large scale infrastructure projects that include little public participation.

Policy name	Description	Sustainability	Public participation	Observation
Government resolution on clean tech solutions	The Finnish government made in 2013 a resolution to promote cleantech solutions in public procurement. The resolution aims to reduce use of energy and materials, harmful environmental effects during the life cycles of products, services and buildings as well as create incentives for developing and adopting new cleantech solutions. The public sector is to promote cleantech solutions in its procurement with particular attention especially in the fields of construction, the energy sector, transport and waste management, and aiming for a 1% share of public procurement for cleantech. Government resolutions provide instructions and guidelines for policy preparation.	The resolution lays ground for improving sustainability through the development and adoption of cleantech solutions. The resolution replaced sustainable choices in procurement as the measure for promoting sustainability in the previous governmental resolution from 2009.	Public participation takes place through the representative democratic process. A ministerial group assesses the impacts of the resolution on a regular basis.	Government resolutions are binding to the the government having made them. New governments decide on which resolutions they want to hold on to.
GREECE				
Green Pilot Urban Neighbourhood Project	Contributing to the 1st Building of the Green Urban Pilot Neighbourhood in Agia Varvara, Attica, Greece, various private companies participated in the project as sponsors of the insulation system. The project of the Green Urban Pilot Neighbourhood is run by the Greek Ministry of Environment and Climate Change, funded by EPPERAA and EU Cohesion funds.	After the implementation of the project, each household will pay little or zero money for heating in winter and cooling in summer, while the living conditions will improve and each resident will feel much more comfortable in the apartment. Simultaneously, the neighbourhood will be upgraded environmentally, with more green spaces, available for all residents. The above gained benefits testify the project's repeatability to multiple neighbourhoods, synchronising the necessity to protect the environment with the need for affordable solutions.	Sustainable development process can only succeed with the active participation of citizens; thereby information campaigns have been launched, educating residents about how they will manage their daily life during and after the project ends.	

Policy name	Description	Sustainability	Public participation	Observation
Trans Adriatic Pipeline (TAP)	The Trans Adriatic Pipeline (TAP) will transport Caspian natural gas to Europe. Connecting with the Trans Anatolian Pipeline (TANAP) at the Greek-Turkish border, TAP will cross Northern Greece, Albania and the Adriatic Sea before coming ashore in Southern Italy to connect to the Italian natural gas network.	As domestic gas production declines in Europe, the pipeline will help secure the continent's energy future by enabling the transportation into Europe of natural gas from a new source. Improving the flow of gas into the EU, TAP will also contribute to Europe's environmental future. TAP's transit countries will receive a boost to their economic future. The project will attract direct foreign investment, while economic development will be stimulated by the introduction of new energy supplies and more competitive energy markets. Jobs will be created by TAP, directly by its contractors and indirectly through various 'spill-over' effects, in manufacturing, utilities, transport, communications, financial and business services. While most of the immediate employment gains will be during the pipeline's construction, TAP will also have a lasting economic legacy. A cornerstone of TAP's commitment to the future of the communities along its route will be the financing of environmental and social investment projects. TAP will help support the EU objective of supplying gas to South East Europe, contributing to the region's future economic and social development.	The project is not dependent on public subsidies and will bring benefits to its host countries. A cornerstone of TAP's commitment to the future of the communities along its route will be the financing of environmental and social investment projects. Discussions are currently taking place with local communities to make sure that these projects are mutually beneficial. TAP is committed to engaging openly, proactively and respectfully with all the communities along its route. Inclusive and culturally appropriate consultations are conducted in Greece, Albania and Italy to provide stakeholders with opportunities to express their views. These have been taken into consideration in the decision making process from the very earliest phases of the project.	

Policy name	Description	Sustainability	Public participation	Observation
EXOIKONOMO II (Energy Efficiency II) Programme	The "EXOIKONOMO II" (Energy Efficiency II) programme supports the implementation of measures and best practices for the reduction of energy consumption by Greek Municipalities. The programme's principal objective is to promote the uptake of actions and recognized good practices to decrease primary energy consumption in existing public buildings and infrastructure. The invitation is made under Greek Operational Programme 'Environment and Sustainable Development' and provided simplified procedures for assessment in order to allow the greatest possible participation of Municipalities in the Programme.	The programme is expected to boost growth, reducing operating costs in local government, while it will also contribute to the creation of new jobs and useful infrastructure for local government and citizens, following a sustainable development model, with innovative technologies. The measure's lifetime extends beyond the decade.	The only way for the public to participate in this programme has been through their application for subsidies. Totally, 139 municipalities participate in the programme, which will lead to energy savings in the range of 8.3 ktoe.	
Exoikonomisi kat' oikon (Energy Efficiency at Household Buildings) Programme	The "Energy Efficiency at Household Buildings" programme provides financial incentives for the implementation of energy saving interventions in the residential sector with the aim of reducing energy needs. The programme, co-financed by the European Union, aims to provide financial incentives for residence buildings that are located in areas with specific zone price and are classified as low energy efficiency buildings.	The implementation of these interventions is expected to lead to an overall primary energy savings of around 31.3 ktoe annually. The current programme was evaluated as very successful despite the fact that it confronted the limited participation of the citizens. This problem solved with the establishment of the first category of incentives with the highest percentage of grand (70%). As a result it was announced the continuation of the programme during the programming period of 2014-2020.	The only way for the public to participate in this programme has been through their application for subsidies. Until March 2014 about 70 thousand applications were submitted for participation in the programme. 40 thousand of them have already been accepted for the provision of financial aid, while 21,333 have completed the proposed interventions with a total eligible budget of around 210 million €.	

Policy name	Description	Sustainability	Public participation	Observation
Hungarian Green Investment Scheme	The GIS uses the revenues generated from the sale of Kyoto units for climate protection purposes. In the spirit of "hard greenification" the revenues can be used exclusively to finance greenhouse gas emissions and only in accordance with the additionality principle. Important elements of the programme support energy efficient building (re-)constructions and a credit guarantee fund.	Through improved energy efficiency the GIS contributes to environmental sustainability by reducing energy consumption and CO2 emission, but it also affects social sustainability through reduction of energy poverty, improved quality of life and public health, increased real estate market values. Economic sustainability is supported by new business opportunities and improved employment.	The GIS was established by the Hungarian Government, the management of the calls of tenders/projects is done by a non-profit Ltd., the calls primarily target citizens and many construction companies (and indirectly manufacturers/producers of the energy efficient equipment) are involved in the implementation, so there is a wide range of public participation.	
Hungarian National Energy Strategy 2030	The Strategy aims the reconciliation of the Hungarian energy and climate policies and focuses on energy savings, the guaranteeing of the security of supply and the sustainable improvement of the competitiveness of the economy. The most important target of the strategy is to seek ways out of energy dependency through the following five cornerstones: energy savings, increasing the share of renewable energy sources to the greatest possible level, safe nuclear energy and the electrification of transport on the basis of the former, creating a biopolar agriculture (i.e. market-oriented flexibility in shift between food and biomass production) and integration to the European energy infrastructures.	The strategy supports environmental sustainability through decreased consumption and reduced GHG emission, the planned measures create opportunities for the business sphere (e.g. construction companies, infrastructure developers, businesses in the renewables related sectors etc.).	A wide range of measures spanning the utilisation and consumption value chain (affecting both producers and consumers) is required for the success. The actual intensity of public participation can be better estimated or observed at the implementation of the related action plans.	The strategy is connected to many other strategies; e.g. National Climate Change Strategy, National Building Energy Strategy (draft) etc.

Policy name	Description	Sustainability	Public participation	Observation
Money back through the window	In frame of the programme the KÖVET Associataion of Sustainable Economies collects information/case studies from companies on investments that prove that money spent on environmental protection are good investments that pay back in a short period and offer economic advantages to the implementing companies (besides lowering their environmental impact). Environmental Savings Prize is awarded in three different basic categories according to the time of return (The nicest washed fruit in bowl, The tastiest low hanging fruit, The biggest high hanging fruit) and also in special categories (e.g. Innovation; Energy Management; Green Office Savings; Carbon Savings; Eco-design).		The programme is managed by an independent association. More than 75 companies have been participated in the initiative, so there is a high interest. Among the supporters/associated partners there are many professional organizations, associations and (public) foundations, that represents a high level of public participation.	
IRELAND				
Climate Action and Low Carbon Development Bill	The Bill will require National Mitigation Plans to be prepared which shall specify the policy measures to be adopted by various Ministers of the Government to reduce greenhouse gas emissions. The Bill will also require five-yearly National Adaptation Frameworks, which shall specify the national strategy for the application of adaptation measures in different sectors and by local authorities to reduce the vulnerability of the State to the negative effects of climate change.	The Bill provides a statutory basis for the national objective of transition to a low-carbon, climate resilient and environmentally sustainable economy by the year 205. Its provides a solid statutory foundation to the institutional arrangements necessary to enable the State to pursue and achieve that "national transition objective".	The Bill has been the subject of wide ranging consultation as part of the examination of the issues by the Parliamentary Committee on the Environment, Culture and Gaeltacht. This include an invitation from interested parties to provide written submission from interested individual/groups and public hearings involving selected groups.	The current form of the Bill does not contain any country or sector specific reduction targets although the mandatory European targets apply to Ireland. The slow enactment of the Bill has not hindered the preparation of National Mitigation Plans which are underway in many government departments.

Policy name	Description	Sustainability	Public participation	Observation
Government's White Paper, Delivering a Sustainable Energy Future for Ireland, Energy Policy Framework 2007-2020.	Ireland's White Paper sets out the Government's Energy Policy Framework 2007-2020 to deliver a sustainable energy future for Ireland. The overarching objective of the policy is to ensure secure and sustainable supplies of competitively priced energy to all consumers.	The sustainability of Ireland's energy supply can be described as vulnerable. To improve the situation Ireland must reduce is reliance on imported fuels and develop cost-effective, indigenous sources of energy in order to provide protection from instability and enjoy greater command over our energy security.	This White Paper has been informed by the outcome of the consultation process on the Government's Green Paper on Energy Policy. Over 100 submissions were received and discussions held with a number of key stakeholders. The outcomes of the consultation process are set out in Section 2 of this White Paper. The replacement energy policy, Ireland's latest green paper, was published for public comment in May 2014 for a period of 2 months and the submissions are currently being reviewed.	
Towards A Resource Efficient Ireland, A National Strategy to 2020	Programme Initiatives/activities include: Green Business Green Hospitality Green Healthcare Green Enterprise SMILE Smart Farming LAPN Stop Food Waste FreeTrade Ireland Community Reuse Network Green Home Greening Communities	The programmes vision statement is living better while using less and aims to deliver sustainable outcomes by promoting efficient use of resources (water, material, energy) in business; by minimising food waste and promoting efficient water use in homes and communities; by maximising reuse and recovery of resources and preserving natural capital; and by encouraging behaviour change to normalise resource efficiency.	The programme and measures aim to shape and influence behaviours by enganing with stakeholders on the shape of the programme through a communication plan; communicating information through the programmes national committee; outreaching to householders on various resource efficiency issues and disseminating information on resource efficiency through the internet and other media.	Irelands National Waste Prevention Programme was first established in 2004 and is recognised by the European Commission as a leading resource efficiency strategy delivering effective initiatives which have achieved substantial environmental and economic savings. Despite financial cuts to the programmes budget in recent years it continues to deliver impressive results as documented in the annual report on activities.
ITALY				
Energy Account	Incentives for photovoltaic and for electricity non-photovoltaic.	To ensure that these sources can met 35% in the electricity sector by 2020.	Nothing special to report	The aim is to stabilize the incidence of incentives on the electricity bill.
Thermal Account	Incentivise thermal energy production from renewable sources and steps up projects for energy upgrades in government buildings.	To improve the power production of small and medium plant.	Mid term public consultation after 16 months open to companies, associations and private citizens to improve the procedure of the measure	To diversify the energy sources.
National Strategy for Energy 2014-2020	Strategy for development of renewable energies and for improving the energy security	The target of Italy is going further the objectives stated in the Europe 2020 climate and energy package	Public consultation of stakeholders (more than 100) and online platform to collect input, comments and recommendations from citizens	
LATVIA				

Description	Sustainability	Public participation	Observation
The main objective of the Green Investment Scheme is to ensure CO2 emission reduction. Since 2009 there have been more than 15 different programmes developed and implemented to reach the target, e.g. increase of energy efficiency in public buildings and by households, research projects, electromobility etc.	GIS has ensured significant results towards low carbon economy. It is the only initiative in Latvia that directly supports climate actions. The policy has ensured continuation as income from selling AAUs has finished. Further investments will be ensured from auctions under EU Emission Trading Scheme.	Different calls under GIS are available for wide society. There have been several programmes developed directly for municipalities, e.g. for installation of renewable energy sources, efficient street lighting etc. However, also households had opportunity in two calls to apply for funding for RES and energy efficiency projects. Different calls are discussed in the government as well as GIS has a local and international monitoring committee to assess the results of different calls.	Lessons learned from the monitoring of the GIS has to be used in the evaluation of the climate actions under EU Structural funds.
Energy security is one of the crucial policy priorities in Latvia. In 2013 Latvian Government approved Long term strategy for energy until 2030 – a competitive energy for society, focusing also on sustainable energy promoting effective renewable energy sources technologies, energy efficiency measures, heading towards achievement of the EU sustainability targets. As Latvian energy sector, especially district heating has high dependence from natural gas imported from Russia, one of the current policies is to ensure fuel diversification, local economy and cheaper energy.	The policy ensures application of sustainability criteria. Wider and rational use of biomass is one of the local solutions to increase national energy security and ensure positive environmental effect.	Calls for funding are available for local municipalities and district heating companies. Criteria and performance indicators are discussed by the Latvian Government.	
Increase of energy efficiency and therefore also improvement of resource efficiency in buildings is another significant priority in Latvia. There are more than 1 million m2 to be renovated due to excessive use of energy and resources. In the meantime it is also important social issue to be addressed.	The policy has direct impact on long term sustainability. Moreover, further sustainable financial and also technical solutions should be identified and addressed to ensure suitable housing for all.	Public participation is crucial to address the policy. Awareness rising and understanding of the proper responsibility is one of the cornerstones for successful of the policy. Currently public participation is increasing however still a lot of effort should be put to reach significant and sustainable outcome.	
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Policy name	Description	Sustainability	Public participation	Observation
REDUCING CO2 EMISSIONS	Poland is negotiating a slower pace of introducing the reductions for CO2 emmissions within EU.	The country position is due to the fact that the energy supply is mainly based on coal and it is going to take time to switch on alternative (nuclear or renewable) energy sources.	The discussion on this issue is present in mass media each time the government negotiates the specific conditions for Poland within EU. The coal miners tend to protest each time the reductions in coal production appear on the political agenda.	The CO2 emissions in Poland is a highly political issue due to its links with coal mining sector which provides fuel to the energy sector. The paradox is that the coal mining sector is subsidised with the negative effect on the energy sector potential improvements. The situation does not seem to change since Poland has switched to the democracy and new economic system in 1989.
PROMOTING GREATER ENERGY SECURITY	Energy security is identified as a key challenge and priority area by Polish government. There is a number of initiatives in process, like gas terminal in Świnoujście, shale gas explorations, plans to install the nuclear power plant (there is none yet operating in Poland).	Energy security seems rather a political issue. The solutions breaking the status quo of dependency on supplies from Russia tend to weak-up the cold war-style tensions and challenge the solidarity among EU contries. On the other hand alternative energy sources like shale gas explorations or nuclear power plant mobilise citizens protests in the locations for possible gas wells or power plant. Renewable energy supply needs time to develop but has a potential to improve energy mix: expected increase of small power plants using renewable energy sources will probably result in decrease in coal consumption for energy creation.	Citizens are normally mobilised when a shale gas exploration or nuclear power plant is planned in their neighbourhood.	

Policy name	Description	Sustainability	Public participation	Observation
REDUCING THE RESOURCE INTENSITY OF WHAT WE USE AND CONSUME	A number of policies policies work to encourage producers and consumers to be aware and make decisions on products based on all phases of a products' life-cycle. The National Environmental Policy in force also addresses the issue of eco-friendly products. Regarding eco-labelling in Poland, the EU Eco-label and national eco-label are in place. In order to ensure the cohesion of integrated product policy, one main governmental body – The Ministry of Economy – is responsible for integrated product policy in Poland.	The policies supporting efficient use of resources do not seem to have a significnt influence on the operations of public and private sector. Awareness of managers in companies and municipalities remains a key factor determinationg whether the energy-efficient solutions are introduced or not. On the other hand the incentive schemes introduced by government policies are fragmented and haphazard, which results in low efficiency of the available solutions.		
PORTUGAL				
Strategic Plan for water supply and Wastewater Treatment (PENSAAR 2020)	The sustainable use of water is a real challenge for the management of water resources, being therefore prioritized in national policies. The main target of the water strategy for 2023 are related with improving the quality of water bodies, the water supply system and the wastewater systems.	An efficient use of water resources aims at guaranteeing the quality and sustainability of water supply services and wastewater sanitation as well as optimize the efficient management of existing resources. For instance, water efficiency in buildings, is not only important as a means for rational use of water, but also for its significant contribution to the energy efficiency of buildings (i.e. energy spending in the urban water cycle and heating of water in the residential sector) and reducing the emission of CO2 and greenhouse gases.	An active involvement from governmental institutions, water suppliers and beneficiaries is crucial for ensuring the efficiency of water and wastewater management as this also includes the use and management of soil, in coordination with measures for management of the territory.	

Policy name	Description	Sustainability	Public participation	Observation
National Energy Strategy For 2020 (ENE 2020)	Two of the core objectives of the National Energy Strategy (ENE2020) are the increase of RES and the improvement of energy efficiency, to enable reduction of imports and increase security of supply, as well as reduce the environmental impact and CO2 emissions.	Sustaining the Energy Strategy – ENE2020 promotes economic and environmental sustainability as crucial to the success of the energy policy, by resorting to instruments of fiscal policy, to some revenue generated in the energy sector by CO2 emission allowances, and other revenues generated by the renewable energy sector, for the creation of a tariff equilibrium fund that enables a continuous renewable energy growth process.	The success of strategies and policies on energy efficiency are very dependent on an active involvement from all the social actors, from decision-maker and suppliers to consumers (companies or families).	
National Waste Management Plans (PERSU)	Reduce, Reuse, Recycle and Resource Efficiency are the basis for Sustainable Waste Management. One of the main drivers for the developments in Portugal in waste management is the implementation of National Waste Management Plans (PERSU) The main objectives of PERSU I was to eliminate open dumps and divert the waste, according to specific quantified targets, to recycling, incineration and composting. While PERSU II aims to adapt EU legislation to Portuguese reality; rationalize the costs; encourage participation of all stakeholders; support incineration with energy recovery and implement MBT as solutions to MSW treatment.	Countries now consider waste to be a priority resource or secondary raw material. The policy focus is shifting from traditional waste management to waste prevention and efforts to adopt a life-cycle approach. Recycling and recovery are seen as important tools for reducing material consumption and improving resource efficiency.	The Ministry of the Environment is responsible for all waste legislation. The organization of the waste management system involves three other types of organizations:  Municipalities which are responsible for collection of (normally only mixed) wastewater; SGRSU which are entities dealing with waste treatment; SPV which is the Portuguese Green Dot System responsible for recycling packaging wastes. Furthermore, activities related with engagement and awareness programs are conducted to sensitize citizens on waste management issues and achieve segregation at source.	
SLOVAKIA				
Increasing energy-efficiency in residential and public buildings	Soft loans and guarantees for increasing the energy efficiency of residential and public buildings.	While there is a rising trend of utilisation of residual heat (from industrial / energy production) for district heating, space heating still relies on non-renewable energy sources (gas, coal, wood).	No active participation in design / planning, rest is unclear as the programme will start at the end of 2015.	If implemented properly, it could contribute to increased energy efficiency of a large stock of old residential and public buildings.

Policy name	Description	Sustainability	Public participation	Observation
Solid waste processing and water sewage	Equity investment, loans and guarantees for municipal waste management and sewage water processing projects.	Net emissions from the waste treatment have been increasing constantly since 1990, landfilling is one of the major contributors.	Pipeline of 14 projects that could be supported in 2014.202 has been defined in consultation with municipalities and large corporates.	Environmental effects will largely depend on implementation. To increase positive effects on CO2 emissions and waste recycling rate, strict environmental
Support for renewables in private household heating	State grants for installation of biomass - fired boilers and solar collectors on residential houses and blocks.	Slovakia remains a GHG-intensive economy by OECD standards, with energy-related CO2 emissions accounting for over 70% of total GHG emissions.	No active participation in design / planning of the 2009-2013 phase, no specific participation for 2015-2020 phase either.	After 2013 the programme has been suspended due to lack of funds. It should be re-opened in 2015 and extend to photovoltaic systems.
SLOVENIA				
Energy efficient buildings	Promoting energy efficiency in public and private buildings, focusing on both: new buildings as on buildings in need of energy renovation. Providing grants, work incentives and other forms of financial assets.	Policy is long term oriented with the perspective of sustainable environment based on energy efficiency, reducing air pollution and adaptation on climate change.		This policy is expected to have strong multiplier effect in economy, employment as well as competitiveness of the companies.
Energy security	No direct policy regarding Energy security exist in Slovenia, however it is indirectly addressed in Slovenian development Strategy 2014-2020 with the focus on renewable energy sources (wind, solar and small hydro power plants).	Approach in this policy is based on principle of sustainable development and is self-sustainable oriented.	Public debate in Energy security in Slovenia was initiated in march 2015 by US embassy call regarding Energy Security and Energy literacy in Slovenia.	There is need for public debate regarding Energy security, which have to contribute in preparation of national energy security oriented document.
Challenges of sustainable traffic	This policy is part of National action plan for resources efficiency, which is still in adoption procedure. Policy propose new instruments and development of already existing instruments in order to reinforce existing deriving from current action plan for effective use of energy 2011-2016.	With long term goal for reducing emission from traffic sector for more than 50% until year 2050, activities seem to strength sustainable development by green procurement, energy efficient vehicles, and low emission fuels.		As the document is still in preparation phase, set of implementation acts have to be prepared in order to implement goals from National plan of resources efficiency.
SPAIN				

Policy name	Description	Sustainability	Public participation	Observation
Fondo de Carbono-FES-CO2 (Carbon Fund)	Law 2/2011, march 4th, Sustainable Economy creates, in section 91, the Carbon Fund for a Sustainable Economy (FES-CO2). This new financial instrument for the climate is conceived with the aim of re-guiding economic activity towards low carbon models and also contribute in following the international objectives taken on by Spain in matters concerning lowering greenhouse effect gas emissions.	By purchasing carbon credits linked to projects or initiatives to lower emissions, FES-CO2 will mobilise resources and eliminate barriers for private investment promoting the activity of companies in those sectors related with the fight against climate change. This Fund will obtain credits that are verified emission reductions for projects carried out in Spain and additionally it will be able to obtain international credits generated under the Kyoto Protocol, as well as any other type of credit that could be negotiated in carbon markets.	The Fund will offer support to the private sector to start-up activities with low carbon emissions, providing the necessary investment climate to promote the development of clean technologies that contribute with the mitigation of climate change.	The Fund will offer support to the private sector to start-up activities with low carbon emissions, providing the necessary investment climate to promote the development of clean technologies that contribute with the mitigation of climate change. Spain needs to increase its efforts to reduce CO2 emissions, particularly in transport but also in the critical power sector
Energy Security - Investing in Green Energies	Promotion of green energies to avoid dependencies on fossil fuels	Green energies are based on natural resources such as water, wind, sun, so the sustainability is ensured once the technologies required become cheaper	No	In Spain, of the total primary energy consumed in 2011, 44.9% was from petrol, 22.3% from natural gas; 11.6% from nuclear sauces; 9.6% from carbon; 5.6% from biomass and biofuels; 4% wind, sun and geothermic and 2% hydraulic.

Policy name	Description	Sustainability	Public participation	Observation
ANGED - Environmental sustainability in the agro-food chain. Resource intensity.	The agro-food chain has signed a voluntary collaboration agreement with the Ministry of Agriculture. Food and Environment (MAGRAMA) that commits them to promote environmental sustainability in their field of activity until 2018. Those signing the agreement will include an environmental dimension into their activity in their annual plans. Furthermore, they will also encourage their partners to use natural resources efficiently, especially raw materials, water and energy. They will also work on raising the environmental awareness of the chain by carrying out educational, communication and dissemination activities for the businessmen/women, workers and consumers.	For a long time now the agro-food chain has been committed to environmental sustainability with their responsibilities with society and, at the same time, they are also committed to carrying out their processes in an efficient way. For years it has demonstrated its implication in the minimisation of environmental impacts that can be caused by the production and consumption of agro-food products, leading to a reduction in the consumption of natural resources such as energy, water, raw material and an efficient use of land and a reduction in the generation of waste.	The Ministry, the Association of Young Farmers (ASAJA), the Coordinator of Organisation of Farmers and Ranchers (COAG), the Union of Small Farmers, the Spanish Federation of Food and Drink Industries, (FIAB), the Spanish Association of Cash & Carry (AESECC) Companies, the Association of Spanish Supermarket Chains (ACES), the National Association of Large Distribution Companies (ANGED), the Spanish Association of Distributors, Self-services and Supermarkets (ASEDAS), the Spanish Federation of Hotels (FEHR) and the Company Association of Modern Restaurant Chains (FEHRCAREM).	
SWEDEN				
Integrated Climate and Energy Policy	The policy sets out ambitious climate and energy targets for short and mid-term as well as long-term priorities. These include targets on GHG emission reduction, share of renewable energy in energy mix, and energy efficiency. The vision by 2050 is that Sweden will have a sustainable and resource-efficient energy supply with zero net GHG emissions.	The Policy is created in pursuit of a sustainable environment, competitiveness and long-term stability.	The county administrative boards, which represent the national government at the regional level, have an assignment from the government to formulate regional energy and climate strategies in collaboration with regional actors including the participation of public.	The International Energy Agency recommends the government to reach a common vision for the decarbonisation of the economy together with academia, industry and civil society on the basis of an overarching 2030/2050 pathway analysis and sectorial technology roadmaps.
Action Plan on Energy Efficiency	In accordance with the EU Energy Efficiency Directive, Sweden submits Action Plan on Energy Efficiency every three years. The Plan covers energy efficiency improvement measures and expected and/or achieved energy savings in the supply, transmission and distribution of energy and energy end-use.	Activities under the Action Plan aim to strengthen the regional and local climate and energy initiatives, to support green procurement by the public sector, to encourage SMEs to manage and audit their energy consumption, and to procure energy-efficient technology.	The county administrative boards, which represent the national government at the regional level, have an assignment from the government to formulate regional energy and climate strategies in collaboration with regional actors including general public.	Since the 2008, Sweden has made significant progress towards achieving a more sustainable and resource-efficient energy supply, improving energy efficiency and supporting energy research, development and demonstration, and innovation in collaboration with EU and other countries.

Policy name	Description	Sustainability	Public participation	Observation
Waste Management Policy	Swedish Waste Management Policy consists of National Waste Plan (2011) and a National Programme for Waste Prevention (2013).	The policy aims to prevent waste generation, reduce volumes of waste, ensure higher reusability and recyclability of resources, reduce the hazardous nature of waste, and facilitate the transition towards circular economy.	The grounding principle of Swedish Waste Management Policy is that all actors bear responsibility. One step to decrease food waste was the creation of a national liaison group with representatives from national authorities, retailers and wholesalers, food companies, consumers and the association of Swedish Waste Management. Consumers represent an important target group in waste management policy and the Swedish Government seeks to make it easier for everyone to separate their waste, especially its hazardous fraction.	
THE NETHERLANDS				
Waste to resource (Van afval tot grondstof, VANG)	Waste to Resource' is the national government programme to stimulate the transition to a circular economy. The programme contains both waste and resource policies all along the chain of raw materials.	Prevention and better management of waste significantly contribute to climate objectives.	The program includes cooperation that with front-running enterprises. For instance national government has concluded a so-called green deal with MVO Nederland (knowledge centre for corporate social responsibility), the Circle Economy foundation and the Amsterdam Economic Board aimed at making the Netherlands a circular hotspot.	
Energy agreement	This agreement between more than forty organisations is laying out the societal energy actions needed for the 2020 horizon.	An important part of the agreement focuses on sustainable energy supply by targeting on more renewable energy (14% by 2020 and 16% by 2023) where the Netherlands were relatively lacking behind in Europe.	The agreement is the result of a bottom up decison making process between more than forty organisations, including central, regional and local government, employers' associations and unions, nature conservation and environmental organisations, and other civil-society organisations and financial institutions.	

Policy name	Description	Sustainability	Public participation	Observation
Raw materials policy	The Raw materials national government policy document is the first move towards an integral Dutch policy on raw materials which includes to secure and increase supply and improve sustainability of supply, to limit demand and where possible improve sustainability of demand and to improve the sustainability and efficiency of raw materials consumption.	The initiative focusses both the sustainability of supply and demand of raw materials and also on the sustainability of raw materials consumption.	Dutch government sees the supply of raw materials is primarily the domain of trade and industry and they will only intervene if the market is not operating optimally. Government will work together with business initiatives and in consultation with knowledge institutions and stakeholder organisations to facilitate, stimulate and coordinate initiatives.	
UNITED KINGDOM				
SMART METERS	Part of the UK's policy for reducing CO2 Emissions and upgrading the UK's energy system. The aim is to supply all homes with smart metes by 2020 letting consumers have more control over their energy use and save energy and money.	The role out of Smart Meters will play an important part in the UK's transition to a low-carbon economy and help the UK create an affordable secure and sustainable energy supply.	The Smart Metering programme works with a number of stakeholders, including large and small energy suppliers, networks, consumer groups and regulators. Working groups from industry and consumer organisations have also been set up.	
Electricity Market Reform (EMR)	EMR is a government policy to incentivise investment in secure, low-carbon electricity, improve the security of Great Britain's energy supply and improve affordability for consumers.	Attracting the investment to transform the UK's electricity market will stimulate the economy and supporting all forms of low-carbon generation will improve the UK's u security and reduce reliance on energy Imports making the market more sustainable in the long term.	The policy involves delivery partners the department of energy and climate change and the national Grid Electricity Transmission plc.	
National Industrial Symbiosis Programme (NISP)	NISP is a business led programme of over 15,000 participating industry members who form a unique network. Through this network NISP identifies underused resources which can then be brought into productive use.	NISP encourages businesses to regard nothing as waste but rather as a new resource which can be adapted and used as a new input to a new industrial process.	The NISP has more than 12,500 members.	

Appendix 1 summarises relevant and representative policies and initiatives in selected countries participating in the CASI project. Each of these summaries is presented in greater detail in respective national level policy briefs available on the CASI website at <a href="https://www.CASI2020.eu">www.CASI2020.eu</a>. A more in-depth European level policy brief is also available on the site.