



ESWET Reply to European Commission’s Public Consultation on “STRATEGY FOR LONG-TERM EU GREENHOUSE GAS EMISSIONS REDUCTIONS”

October 2018

Guidance on the questionnaire

After a few introductory questions related to your general profile in section 1, the questionnaire has a number of questions in section 2.

To participate in the public consultation you are not obliged to fill in all questions. The different sections include questions on greenhouse gas reductions, the impact of consumers, the economic activity, energy, forests and land use, education and research, financing, meta trends, actors and adaptation to climate change. The final section is technical and more focussed on sectoral stakeholders (industry, transport, agriculture, land use).

Some questions are multiple choice questions. Other questions are open to which you can add if you want your comments. Please keep comments clear and concise because there is a limit on the number of characters you can enter.

If you want to express your views in more detail you can also upload a document with your views and insights.

As the results will be published on the Internet, please read the specific privacy statement attached to this consultation. It informs you about how your personal data and contribution will be dealt with. In the interest of transparency, if you are replying on behalf of an organisation, please register with the register of interest representatives if you have not already done so.

Registering commits you to complying with a Code of Conduct. If you do not wish to register, your contribution will be treated and published together with those received from individuals.

Questions

Long term greenhouse gas emissions reductions

To achieve its temperature objectives, the Paris Agreement also includes a long term ambition to achieve a balance between emissions and removals of greenhouse gases by human activities in the second half of this century.

Given that addressing climate change is a global challenge requiring all parties of the Paris Agreement to act, what do you think the EU should contribute to achieve the Paris Agreement's objectives:

- Reduce greenhouse gas emissions in the EU by 80% by 2050 compared to 1990 levels
- Reduce greenhouse gas emissions in the EU more, within the range of 80 to 95% by 2050 compared to 1990 levels
- Achieve already a balance between emissions and removals in the EU by 2050

In your opinion, what are the biggest opportunities and challenges:

1000 character(s) maximum

The transition to a low-carbon economy will provide opportunities for new ideas to disrupt the traditional energy landscape. The waste management sector should be fully involved in this transition as, in Europe, not only it contributes to a very small share of greenhouse gases (GHGs) emissions but, in the future, it could contribute to important GHGs emissions savings by fully switching from a waste disposal model to a waste and resource management one.

The challenge will be to make this transition take place on a global scale so as to maintain a level-playing field between all actors of the transition.

Employment and a socially fair transition

In the coming decades, the transition to a low carbon economy will impact even more how we work and how we produce goods and services. Which statements below correspond in your opinion to the impact of climate change and the low carbon transition in your working environment?

Do you expect your company to create or reduce jobs due to the low-carbon transition?

- Create
- Reduce
- No opinion / I do not know

What could affect your job most in the future?

- The low carbon transition
- Digitalisation
- Impact of globalisation
- Socio-economic policies (for instance fiscal policy)
- Other

Do you think you or the sector you are active in would benefit from training of staff in the context of the energy and low carbon economy transformation?

- Yes
- Yes, to some extent
- No
- No opinion / I do not know

The impact of the low carbon transition on your sector

Do you consider the low carbon transition as an opportunity or as a challenge for your sector?

- A opportunity
- A challenge
- Both
- None
- No opinion / I do not know

Indicate by how much your sector could reduce greenhouse gas emissions by 2050 compared to today?

- It cannot reduce
- Up to half
- By more than half
- Can decarbonise entirely
- No opinion / I do not know

What would be the preferred route to reduce these emissions in your sector?

- Further electrify
- Use other low carbon fuels, like hydrogen
- Improve to the maximum energy efficiency
- Circular economy, including recycling and re-use
- Development of new products and business
- Other
- No opinion / I do not know

* If other, please specify:

Text of 3 to 200 characters will be accepted

Improving waste management outside of the EU and developing the circular economy.

Will you (or your sector) invest in new low-carbon technologies?

- Yes, as a priority
- Yes, but not as a priority
- No, it has already invested enough
- No
- No opinion / I do not know

Do you think your sector could be further integrated with others so as to decrease emissions while increasing overall efficiency?

- Yes
- No
- No opinion / I do not know

Do you think the low carbon transition will lead the EU economy to:

- Modernise and reinforce its competitiveness
- Modernise, and reinforce its competitiveness, but only if non-EU countries and regions also engage in the transition towards a low carbon economy
- Lose competitiveness

No opinion / I do not know

Do you think the low carbon transition can help the EU industry modernise and grow?

Yes

Yes, but only with public support

Yes, but only if non-EU countries and regions also engage in the transition towards a low carbon economy

No

No opinion / I do not know

How can opportunities and challenges (in particular related to carbon intensive sectors or regions) be addressed? What key economic transformations should the EU pursue to achieve a low carbon and resilient economy?

1000 character(s) maximum

R&D and the reduction of overall energy consumption are the best way forward to transition towards a low carbon economy. Moreover, the EU should foster economic support from both the public and private sector and increase the price of CO2 emissions.

Energy

The energy system today is responsible for ca. 75% of the EU's greenhouse gases emissions and undergoes a rapid transition due to e.g. cost reduction of renewables, improvements of energy-efficiency and rapid development of new technologies (e.g. batteries) driven i.a. by policies put forward by the EU and its Member States. Accelerating this change will play a central role in the transition of our economy towards a carbon-neutral economy.

In the following table listing different energy technologies, please rank each option in the table below from 1 (important) to 5 (not important) on what role you think they will play in the clean energy transition (not all options need to be ranked)?

	1	2	3	4	5
Energy efficiency reducing the need to produce energy	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Renewable energy from wind, solar or hydro	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other forms of renewable energy, like geothermal, wave or tidal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Nuclear energy	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fossil fuels with Carbon Capture and Sequestration	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solid biomass for heat and electricity production	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advanced Liquid Biofuels	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biogas from agricultural and domestic waste	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electricity storage (e.g. batteries)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hydrogen (produced in a carbon-neutral manner)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-fuels derived from hydrogen	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** If other, please specify:**

Text of 3 to 200 characters will be accepted

Waste-to-Energy: 1

CHP: 1

*** What are the biggest opportunities, including for the wider economy? What are the biggest challenges, including as regards public acceptance or the availability of land and natural resources, related to these future developments?**

2000 character(s) maximum

Pressure on land and resources is a great challenge that makes some practices, e.g. cutting down trees to raise crops for energy production, rather counterproductive. On the other hand, opportunities should be sought to enhance the efficiency of processes in order to reduce resource use, but also to develop circular approaches where possible.

Education, research and innovation

Considering the long time frame of the strategy, and the inherent magnitude of the decarbonisation transition, the central role of accelerating research and innovation for facilitating this transition will be crucial.

How best could awareness be raised to create the right attitude and values/ mind-sets?

At most 3 choice(s)

- At school through education
- Local and regional campaigning
- National and EU wide campaigning

On which sectors should R&D efforts focus primarily in the coming decade to best support the low carbon transition?

At most 6 choice(s)

- Energy
- Industrial processes
- Transport
- IT
- Agriculture
- Other

On which cross-sectoral domains should R&D efforts focus in the coming decades? Is there a particular need for large scale deployment of certain innovative technologies? Is there a different role for authorities and private sector in support R&D and Innovation?

1000 character(s) maximum

There is definitely a need for public authorities and the private sector in support of R&D and Innovation.

Financing

In many cases, the low carbon economy and energy transition needs high upfront investments with subsequent reductions in operating and fuel costs. In addition, this transition as well as climate change itself will most likely affect the value of existing investments and assets of companies. Finally, to achieve the transition efficiently, the viability and profitability of investments need to be ensured on the long-term. Most of these investments will have to be funded via private finance.

Will the sector that you are active in require significant additional investment in the context of a transition to a low carbon economy?

- Yes**
- No**
- No opinion / I do not know**

For the sector that you are active in, is there a financing gap for making the transition to a low carbon economy?

- Yes**
- No**
- No opinion / I do not know**

Should public sector be more involved in ensuring adequate financing for the low carbon transition?

- Yes, through direct investment**
- Yes, through measures ensuring more low cost finance for sustainable investments**
- No because of the risk of prompting inefficient investment leading to stranded assets**
- No because of crowding effects on other sectors**
- No opinion / I do not know**

Would you consider that, in your sector, companies are sufficiently transparent about the financial risks they face due to climate change and the low carbon economy and energy transition?

- Yes**
- No**
- No opinion / I do not know**

Meta trends

Do you think the following trends are important to reduce greenhouse gas emissions?

Economic transition towards a more circular economy?

- Positive
- Negative
- Neutral

Digitalisation, including robotisation and artificial intelligence?

- Positive
- Negative
- Neutral

Shared economy?

- Positive
- Negative
- Neutral

Further interdependency of sectors across borders through globalisation?

- Positive
- Negative
- Neutral

Actors

Local authorities such as cities and local communities, as well as other actors such as civil society and the private sector, can play an important role in achieving the energy transformation, reducing greenhouse gas emissions and adapting to climate change. Indeed thousands of cities, companies and citizens' organisations are implementing the low carbon economy and energy transition through projects covering energy, transport, food and waste management, often achieving important local co-benefits related to economic development, health and wellbeing.

Which of these non-state actors do you think will impact most your or your sector's contribution to delivering the EU's ambition to become a low carbon economy?

- Regional government**
- Towns and cities**
- Businesses**
- Philanthropies**
- Civil society (NGOs, ..)**
- Religious groups**

Reducing industrial greenhouse emissions

Industry has a diverse set of greenhouse gas emissions sources, the majority are linked to energy consumption but also a significant amount of emissions comes from chemical processes, for instance in the steel, cement and chemical sectors.

Industry has a number of mitigation options to reduce its greenhouse gas emissions. These typically involve improved efficiency (e.g. using more efficient products and technologies, reusing waste heat, etc.) and fuel substitution (e.g. electrification of its processes). But it also includes feedstock substitution, be it with bio-material or by employing Carbon Capture and Utilisation (CCU) technologies that see CO2 emissions being re-used in other production processes. These technologies also often benefit from further integration of energy and industrial sectors.

Please indicate for which sector you see any of the above or other mitigation options of particular importance. Please indicate what your view is in terms of mitigation potential, economic potential and technology readiness. Assess each option as High, Medium, Low or Zero for each criterion and indicate in which year you think the technology would be ready for large scale deployment.

	Industrial Sector	Technology option	Mitigation potential	Economic viability	Technology readiness	Year of large scale deployment
1	Waste management	Landfill diversion	Very high	High	Already available	Already now
2	Waste management	CHP	High	High	Already available	Already now
3	Waste management	CCU	Very high	Low	Already available	2025
4						
5						
6						
7						
8						
9						
10						