

Break-out session 2: The Potential of Innovation

- Moderator: Christian Egenhofer (CEPS)
- Rapporteur: Joanna Szychowska (DG Internal Market, Industry, Entrepreneurship and SMEs)
- Minutes-taker: on behalf of the European Commission - Pracsis

Minutes

Moderator Christian Egenhofer divides the session into three blocks on the following issues:

1. Technology neutrality
2. Effects of innovation on competitiveness
3. Regulation and innovation

1. Technology neutrality

The moderator asks the room if it is in favour of or against technology neutrality. A consensus in favour of technology neutrality seems to emerge, but this becomes more nuanced during the session.

This is later confirmed by the rapporteur Joanna Szychowska (European Commission), who remarks that ‘the truth is probably somewhere in between’.

The following arguments **in favour of technology neutrality** are expressed:

- A Dutch representative of EUROBAT insists on technology neutrality because of the multitude of different types of batteries that are being produced (such as start-stop batteries and batteries for electric vehicles). ‘We should keep open a window of opportunity. We should maintain a certain production capacity’.
He explains that certain skill gaps hamper technology neutrality for the battery sector.
- Robert Wright of ePURE states in relation to biofuels that ‘we’ve seen a total absence of technology neutrality for the last five years’. He argues that ‘technology neutrality should not necessarily mean the same as policy neutrality’. How do we tackle the problem of politically- or ideologically-driven dislikes of certain alternative fuels?
- Delegate Van Essen of the Dutch consultancy CE Delft remarks that an overall policy framework should aim at technology neutrality, to let the market decide on the most cost-efficient solutions. However, it should be kept in mind that different technologies face different types of barriers.

Also, arguments are expressed that go against **technology neutrality**:

- Greg Archer, a representative of Transport & Environment, speaks against technology neutrality, because ‘no disruptive technology can succeed without support’. He argues for support to electrification of transport, while gas and biofuels (except for a small niche) should not be encouraged.
- Sandrine Dixson-Declève of The Prince of Wales’s Corporate Leaders Group and the European Biofuels Technology Platform underscores the ‘complexity of picking winners’ but insists that ‘some bandwidth to support breakthrough technologies’ should be kept. She argues that the development of breakthrough technologies should be facilitated, which is ‘more of a funding game’.
As regards the transition to new technologies, she regards taxation as an appropriate instrument, like the shift from dirty to clean fuels under the Quality Fuel Directive has shown.
- Piero Cavagliasso, active in the advanced biofuels sector, insists that new technologies should receive support. ‘A new technology is like a kid. You cannot let it compete with adults. Measures are needed to introduce a product into the market.’
- A delegate remarks that off-setting carbon should be recognised as a technology.

Paul Schockmel of the European Association of Automotive Suppliers (CLEPA) elaborates on the balance between picking winners and giving different technologies the opportunity to develop. ‘The EU is a world leader in internal combustion engines. If we want to remain a world leader, this means that we should take a position, which is not entirely technology-neutral. At the same time, we want to expand the portfolio of technologies (such as electrification), not knowing who will be the winner.’

Besides support for a certain technology (‘picking the winner’), **the formulation of performance indicators** and **taxation** also define technology neutrality:

- Paul Schockmel (CLEPA) argues that certain fields are not covered by test procedures or by current targets or legal requirements, such as eco-innovation.
- John Cooper of Fuels Europe illustrates how taxation works in favour of a certain technology: ‘Where efficient cars and advanced biofuels are still being taxed, electrical vehicles are not, regardless of whether the electricity is sourced from fossil fuels’. He states that taxation and vehicle registration are not technology-neutral at present.
- As concerns fuel quality, a delegate of Neste Oil, active in renewable diesel, argues for long-term GHG emission targets or carbon intensity targets as a neutral performance indicator. She adds that 2030 targets for transport need to be put in place.

The discussion continues with the question of whether technology still needs ‘new buildings blocks’ (if technology is sufficiently developed or whether further support is needed).

Two times during the session, Kai Luecke of Bosch stresses that **different types of technology should be complementary**, and that they should not be seen as competitors (such as internal combustion engines versus electric vehicles). He gives electrification as an example, which does not yet work for heavy lorries.

Agreement emerges in the room on the need for **research**. If the EU aspires to remain the world leader in internal combustion engines, Kai Luecke (Bosch) argues, it should invest in research. ‘It’s a research game!’

2. Effect of innovation on competitiveness

The next part of the session aims at answering the question of what drives innovation, and what does not drive innovation.

On the question of what the EU can do, an attendee representing Goodyear calls for **market surveillance** to ensure that all competitors comply.

A delegate of the European Tyre and Rubber Manufacturers Association (ETRMA) stresses fairness. ‘A regulated field should be a **level playing field**.’

On the question of how the EU can encourage innovation, an attendee from the Leaders of Sustainable Biofuels calls for a swift regulation on biofuels, which is **clear, credible and long-term, capable of attracting investors**.

A Dutch representative of EUROBAT calls for ‘**less is more**’, or, like the motto of the current European Commission, ‘better regulation’. ‘Battery manufacturers face a large amount of regulation. Regulation for batteries has ‘quadrupled’. This complexity makes manufacturers look at other parts of the world.’

Neil Valentine of EIB makes a reference to the change in tone for **different financing instruments**. The European Commission is moving away from grants in the direction of guarantees and loans, in line with the Juncker Plan. Money is now put into risk absorption. ‘Project promoters should design their projects differently’. He mentions the EIB initiative InnovFin as an example for new ways of financing innovation.

A representative of ACEA lists the four criteria of what is good regulation:

1. **Consistency** – The example of diesel is cited as an example of inconsistency: first encouraged and then discouraged
2. **Predictability** – Needed to plan and develop technology

3. **Affordability** –The consumer that should buy the innovation. ‘All innovation comes at a certain price. Is the consumer willing to pay the price, like for electric vehicles?’
4. **Infrastructure** - This is needed to develop the confidence of consumers, for example in the case of alternative fuel vehicles.

Whereas industry usually demands predictability from policy-makers, this is also in the hands of manufacturers, argues Petrouschka Werther, representative of the Dutch government. ‘Diesel cars were initially presented as clean, but when they proved to be not, they were taken off the streets’.

Another point that is mentioned by UNEP and Transport & Environment amongst others is that regulation should not be limited to the EU. ‘**New innovations should also become standard on emerging markets.**’ The attendee of Transport & Environment stresses that standards (for 2025 on internal combustion engines) should establish investment certainty. Research should develop cutting-edge technologies such as battery electric vehicles and internal combustion engines further to ensure that the EU stays competitive globally. According to the delegate of UNEP, the UNEP’s Global Fuel Economy Initiative shows that other parts of the world demand solutions that address both competitiveness and climate change.

The call for **electrification** is later repeated by Anders Kärrberg of Volvo. Warning about ‘China’, he calls for standardised incentives and an infrastructure initiative across Member States.

A clear incentive for innovation is the ambition to be an early mover on the market and to gain **first-mover advantage**, as is expressed by Petrouschka Werther, a representative of the Dutch government. She gives the Dutch example of the deployment of charging infrastructure for electric vehicles that is currently being sold to the United States.

Contrary to Petrouschka Werther, Kai Luecke of Bosch prefers a gradual transformation to new technologies over disruptive technologies for reasons of industrial capacity and consumer behaviour (a consumer is more inclined to buy a hybrid car than a fully electrical vehicle). ‘It’s nice to be a first mover, but the first movers have long moved’ (sic).

A representative of the Union of European Petroleum Independents (UPEI) notes that many innovations in the oil sector have not been recognised, whereas much money has been put in biofuels, a technology that did not achieve what it should have.

An attendee of Arcelor Mittal stresses that the embedded emissions of materials should also be addressed.

Delegates of the European Cyclists Federation and UNEP stressed the potential of two-wheelers.

The delegate of Volvo states that the car industry should negotiate a more flexible scheme on eco-innovation, which takes safety, collision avoidance and automatic driving into account.

Also, skill gaps, leaving the Swedish car industry with a shortage of thousands of engineers in a couple of years, should be addressed. Additionally, the importance of eco-innovation was mentioned by Bosch.

3. Regulation and innovation

The session goes on with a discussion on what the best regulatory parameters are and what in the regulatory field is driving innovation.

Long-term predictability is mentioned the most by Piero Cavagliasso, of Biochemtex, who argues that ‘the clearest method to convince investors is certainly a target’, amongst others.

John Cooper of EuroFuels elaborates: ‘Regulation should support big investments. Big companies need 15 to 20 years for planning and development. Therefore, investors need to know the framework for 2030. We are already struggling to formulate targets beyond 2020, which is tomorrow.’

During the session, multiple references are made to policies on energy sources like solar, biofuels and diesel that failed to provide stability. John Cooper: ‘For renewable energy, we’ve had a patchy period. Renewables in fuels is really difficult. We are lacking in long-term visions’.

An Irish participant underscores that the key guiding principle for the European Commission should be that ‘it does not change its mind’.

The success of long-term targets is confirmed by a Brazilian delegate of the Brazilian Sugarcane Industry Association (UNICA). Despite major changes that Brazil has gone through (from dictatorship to democracy, from right- to left-wing politics), the country has known a stable biofuels policy since the 1970s, resulting in the current 42% share of biofuels (ethanol) in the current fuel mix, and the country’s fleet 65% share of ‘flex fuel vehicles’.

Another participant adds that the Brazilian example demonstrates the need for a **holistic** or **harmonised** or **systemic** approach, ‘in which all players are asked to play their role’.

Patrik Ragnarsson of European Aluminium confirms that long term predictability is the major factor that drives innovation. He adds that the **right parameters** should be used. Where the US uses foot printing (or the size of a vehicle) as a parameter, the EU uses mass. This should be as valuable as for example aerodynamic improvements or engine efficiency.

John Cooper (Fuels Europe) expresses his belief in the approach of keeping a portfolio of technologies in combination with a performance indicator that includes a **price on carbon**.

On the question of what type of regulation hampers innovation, Kai Luecke of Bosch mentions purchasing incentives. ‘It is likely that financing ministers do not have enough money, and moreover, this money could better be spent on research to develop disruptive technologies.’