

Bellona Europa response to the consultation on the preparation of a legislative proposal on the effort of Member States to reduce their greenhouse gas emissions to meet the EU's greenhouse gas emission reduction commitment in a 2030 perspective

The Effort Sharing Decision

June 2015

The Bellona Foundation is an independent non-profit organisation that aims to meet and fight the climate challenges, through identifying and implementing sustainable environmental solutions. We work towards reaching a greater ecological understanding, protection of nature, the environment and health. Bellona is engaged in a broad spectre of current national and international environmental questions and issues around the world.

Pollution knows no borders, thus Bellona works with and against anyone and everyone relevant to our work, both nationally and internationally. Bellona has a solution-oriented approach to the environmental challenges and has since 1998 had extensive cooperation with a number of companies in different industries and businesses. Our approach is that to achieve results one must jointly work out the best social and environmental solutions, and make these financially profitable and viable. Bellona has always been and remains an independent watch dog that investigates, scrutinises and reports any environmental crime we uncover.

The Bellona Foundation was founded in 1986. We are currently 65 employees, working at the main office in Oslo and our three international offices in Brussels (Belgium / EU) Murmansk (Russia) and St. Petersburg (Russia). Bellona has been established with an office in Brussels since 1994.

Introduction

Given that the Effort Sharing Decision (ESD) currently regulates more than half of the Union's total greenhouse gas (GHG) emissions, it is therefore of crucial importance to ensure that significant incentives and financial support are provided for climate mitigation initiatives in the ESD sectors. **Bellona sees the transport sector in particular as a large and untapped sector for significant amount of cost effective mitigation potential.** Bellona has been active on the topic of transport sector decarbonisation for over two decades, and was a driving force behind the development of Norway's electrification strategy, the country with the highest penetration of electric vehicles (EVs) per capita in the world today. **Even though a variety of clean vehicle technologies and fuels are in development and use, Bellona sees EVs as representing one of the most promising technologies for cutting CO₂ emissions, reducing petroleum reliance and improving local air quality.** Additionally, EVs will help to increase the predictability of the electricity sector, as EV batteries can be reused in the grid to store and manage wind and solar-based electricity, thereby boosting energy security, optimising the use of renewables, cutting CO₂ emissions, and last but not least, passing on the wholesale price advantage of renewables while cutting the need for excess backup capacity provided from fossil plants. As a consequence the focus of this response is on the electrification of the EU transport sector and its contribution to broader climate action.

Initiatives in the EU transport sector could build on good practices of policies and measures observed in the Norwegian transport sector to promote the widespread uptake of EVs. The attainment of 50,000 EV registrations in Norway last month can be attributed to a number of regulatory and financial incentives provided by the government to induce EV-purchase. First and foremost, the government has introduced a generous package of financial incentives, such as significant tax exemptions and free re-charging and parking at public parking spots, which have rendered EV ownership a cost-saving opportunity at both purchase point and during use. To ensure consumer confidence in the technology and overcome 'range anxiety' barriers, the Norwegian government has invested in an extensive re-charging infrastructure. In addition to those pull factors, the government adopted stringent (85g/km, thus 10 grams below the EU-wide target) emission performance standards for newly sold vehicles. This, in addition to the country's car import tax, has acted to penalise more polluting cars, and to incentivise EV purchase.

Drawing on the Norwegian experience, Bellona provides a number of recommendations for enhanced EU-wide action in the transport sector. These include the tightening of the 2030 GHG emission reduction target via the 'flexibility clause' following the UN climate negotiations in Paris; the tightening of emissions performance standards for new passenger car; the

establishment of an EU-wide funding mechanism to support initiatives in the transport sector; the timely and ambitious implementation of the Alternative Fuels Infrastructure (AFI) Directive; the need to ensure a more holistic approach to EU transport electrification, so as to include long-distance sea and road freight transport; the need to ensure that the transport sector remains outside the EU ETS; and the need to limit flexibilities under the ESD.

I. Further evidence and studies on implementation of the Effort Sharing Decision at Member-State level and at regional level

In accordance with Article 14 of the Effort Sharing Decision (ESD), and to establish a solid knowledge-base for the 2030 proposal and its impact assessment, the European Commission is conducting an ex-post evaluation of the current ESD. Member States report their greenhouse gas emissions and on progress towards their 2020 commitments annually; the results of these reports are published each year by the European Environment Agency and the Commission. In the context of the European Semester, the European Commission also publishes annual reports on Member States' progress with respect to their 2020 targets. To support the evaluation process, the Commission would welcome any additional studies and evidence from stakeholders.

Q1. Do you have any studies on: 1) good practices of policies and measures that are of particular interest for sharing with other Member States; and 2) other benefits apart from greenhouse gas emission reductions; that you think the Commission should be aware of?

In your view, what are the key lessons learned of these studies relevant for the European Commission and other Member States, and what other benefits does ESD implementation bring (e.g. in terms of job creation, energy security, health benefits, ...)?

Despite the fact that the ESD could serve as a useful tool for emission reductions in principle, it has faced a number of limitations in practice, mainly due to the overly generous allowances and the possibility to use flexibilities. Bellona believes that the transport sector's full emission reduction potential can be exploited via the enactment of regulatory and financial incentives to influence consumer behaviour towards more climate friendly choices. The below listed publications of Bellona provide a list of best practices in transport sector decarbonisation and lessons to be drawn by EU Member States:

1. ***“Electromobility in the EU: State of Play and Way Forward”*** (June, 2015). This brief looks at the state of play for electromobility in the EU and provides a list of recommendations for the way forward, which include:
 - a. **Making EVs a cost-saving option, at both purchase and during operation.** Public authorities should provide sufficient financial incentives through the granting of meaningful tax differences favouring EV purchase, and through a number of other benefits to EV owners including free parking and re-charging, etc. In Norway, 41% of EV buyers quoted cost-saving as primary reasons for buying an EV.
 - b. **Building consumer confidence and thereby demand.** To this end, governments should secure direct investment in visible, accessible and EU-wide compatible charging infrastructure. Moreover, Member States should ensure the timely and ambitious implementation of the recently adopted Alternative Fuels Infrastructure (AFI) Directive, which sets common technical standards for the building of re-charging stations for EVs across EU Member States and minimum number of re-charging stations per Member State to be built. When preparing their National Plans (mandated by the AFI Directive), MS should incorporate measures to promote smart charging of EVs to allow them to effectively integrate into the power system so as to facilitate the reliability of supply and the smooth EV mobility. The above listed measures will act to stimulate consumer demand which in turn will ensure manufacturers’ confidence in the market and thus supply.
 - c. **Building car makers’ confidence.** Public authorities should facilitate an EV-friendly regulatory environment; with sticks, such as the tightening of emission performance standards for cars in the upcoming review process of Regulation (EC) 443/2009, to be set at a minimum of 70g/km for 2025. The early attainment of vehicle emission performance standards for 2015 is a clear indication of the car manufacturer’s ability to adapt technology to meet these standards.
 - d. **Improving EV batteries and ensuring suitability for energy storage.** Car manufacturers should provide direct investments towards the further improvement of the reliability and durability of batteries, and ensure the suitability of batteries for use and re-use for energy storage purposes. Applying EV batteries for energy storage holds the potential to revolutionise the EU energy market, while enhancing energy supply security.
 - e. **Enhancing public awareness of EV benefits, both cost-saving and environment.** European leadership should ensure the proper communication of EV benefits to consumers. Moreover, European leadership should undertake necessary measures to ensure the recommendations set out in the EU’s Energy Union Strategy are followed through, including: ensuring electrification of transport is a high priority in the

envisaged Energy Union, with full integration of EVs in urban mobility policies and in the electricity grid, both as energy consumer and potential storage facilities.

2. "[**Electric Vehicles: The Norwegian Experience in Overcoming Barriers**](#)" (March, 2015). This brief examines the Norwegian experience in overcoming actual or perceived regulatory, financial and psychological barriers to the wider deployment of EVs. Bellona has played a key role in pushing for the introduction of financial and regulatory EV-friendly policies by the Norwegian government. Member States of the EU could draw on the Norwegian experience, which provides a number of good practices of policies and measures. Below is a summary of the core measures Norway has put in place to drive electromobility forward:
 - a. Adoption of 2012 legislation setting the target of a carbon-neutral transport sector by 2030. To this end, **fleet-average CO₂ emissions from new passenger cars of 85 grams per kilometre** were set (this is 10 grams below the EU target of 95 grams).
 - b. Ensuring an almost **carbon neutral electricity sector**, with hydropower facilities covering over 95% of domestic generation.
 - c. Introduction of a **car import tax** calculated on the basis of a car's CO₂ emissions, NO_x emissions, effect and weight, thus penalising more polluting cars, and incentivising EV purchase.
 - d. Implementation of a **generous package of financial incentives** to EV buyers, including: exemptions from purchase tax and VAT; exemption from road and ferry tolls; free parking in public charging spots; more affordable insurance; and free-recharging from thousands of points across the country, among others.
 - e. Building an **extensive re-charging infrastructure** and providing subsidies of up to EUR 6,000 a year per vehicle for installation of charging points in homes.
3. "[**The Disruptive World of Large Scale Energy Storage**](#)" (October, 2014).
 - a. This brief points out that developments in the EV industry will directly result in the deployment of large amounts of battery electricity storage. Energy storage in turn does not only hold the potential for us to make better use of renewable power, but in doing so it also allows us make less use of fossil power. Being less dependent on fossil power erodes the case for subsidies like capacity payments keeping this industry alive. The brief notes that the large-scale electricity storage technologies will have important benefits in terms of boosting energy security, optimising the use of renewables, cutting CO₂ emissions, and last but not least, it is potentially positive for consumers as the wholesale price advantage of renewables can be passed on, while the need for excess backup capacity provided from fossil plants is reduced.

II. Complementary EU-wide action in the sectors covered by the Effort Sharing Decision

Member States are responsible for implementing policies and measures to meet their obligations under the Effort Sharing Decision (ESD) according to their national situation. These may include a variety of national actions ranging from economic instruments, such as tax regimes to support specific low-carbon fuels, information campaigns to promote public transport, integrated urban and transport planning, supporting improved energy performance in buildings and switching to renewable energy for district heating.

To a certain extent these national measures are also supported by other EU-wide climate and energy policies, including on CO₂ emission standards for light-duty vehicles (cars and vans), non-CO₂ gases, energy efficiency (e.g. Energy Performance of Buildings Directive, Energy Efficiency Directive) and on renewable energy sources (Renewables Directive).

Q2. Is the current scope of EU-wide action and legislation OTHER than the ESD to support Member States' emission reductions in ESD sectors sufficient, or should it be enhanced? a) The current scope is sufficient; or b) The current scope should be enhanced.

Bellona is of the opinion that the current scope of EU-wide action and legislation to support MS' emission reductions in ESD sectors **should be enhanced**. In particular, Bellona views the transport sector as a large and untapped sector for significant amount of cost effective mitigation potential. Failure to fully exploit all abatement potential from transport as well as other ESD sectors could result in increased costs of mitigation for MS of meeting their 2030 targets. The recent EU Energy Union Strategy states that Europe needs to speed up the electrification of its car fleet and other means of transport to become a leader in electromobility and energy storage technologies. The document notes that this would require a full integration of EVs in urban mobility policies and in the electricity grid, both as energy consumers and potential storage facilities. Bellona welcomes these messages and calls on the European Commission to ensure they are backed with concrete actions. Below are Bellona's recommendations for EU-wide enhanced action:

Tightening of the 2030 GHG emission reduction target via the 'flexibility clause':

The European Council endorsed a binding EU target of at least 40% domestic reduction in GHG emissions by 2030 compared to 1990 levels. The agreed upon target is to be delivered collectively by the EU in the most cost-effective manner possible, with the reductions in the ETS and the non-ETS sectors amounting to 43% and 30% by 2030 compared to 2005 respectively. According to a number of studies the majority of MS would need to undertake only minimal

domestic action in order to meet their ESD targets due to the possibility to use international credits through the flexibility instruments. MS can currently use international offsets for up to 3% of their 2005 emissions in the ESD sectors, to meet their 10% emission reduction target by 2020 compared to 2005 levels. Bellona therefore sees a revision of the GHG emission reduction target following the outcome of the UN Climate Summit, COP 21, in Paris as necessary in order to be in line with the 2050 EU Decarbonisation Roadmap and to be able to halt global temperature rise below 2°C.

Tightening of emissions performance standards for new passenger cars:

The 2009 Regulation (EC) 443/2009 sets a limit for the emissions performance of newly sold vehicles in the EU of 130g/km to be achieved by 2015, and mandates that this level is reduced further to 95g/km from 2020. Despite being an important step towards transport sector decarbonisation, the Regulation has proven inadequate. A report of the European Environment Agency (EEA) shows that the average passenger car sold in 2013 emitted 126.7g/km, which is already below the legal threshold for 2015. This attainment of emission performance standards ahead of set deadlines can be attributed to technological improvements and the higher sale of less-carbon emitting vehicles. In view of the agreement on the 2030 Climate and Energy Framework for Europe, as well as the attainment of vehicle CO₂ emission targets ahead of set deadlines, Bellona believes that emissions performance standards should be tightened in the upcoming review process of Regulation (EC) 443/2009 (to be concluded by 2016). More specifically, Bellona regards **a target of 70g/km for 2025 as the absolute minimum level of ambition**. The improvement of vehicle efficiency along with a sustainable electrification strategy are key mechanisms for delivering the 60% reduction in CO₂ emissions in the transport sector by 2050 with respect to 1990 levels, as called for in the EU White Paper of Transport of 2011. In addition to the tightening of emission performance standards Bellona also calls for the tightening and standardisation (where not yet in place) of the performance of compliance tests on vehicles.

Establishment of a funding mechanism to support cost-saving initiatives in the transport sector:

MS have expressed concerns with regards to the relatively high costs for meeting their 2030 GHG emission reduction targets required in ESD sectors. This has been especially the case for those countries with relatively high economic output per inhabitant (in the ESD sectors the wealthier countries will be faced with more ambitious climate targets than poorer ones, spanning from 0% to -40% compared to 2005, and adjusted for MS with a GDP per capita above the average to also reflect cost-effectiveness). In order to address cost concerns and ensure sufficient abatement action in the transport sector, **Bellona calls for a funding mechanism to provide support for initiatives undertaken in Member States to help leverage and unlock**

private investment in a far broader range of sectors than those covered by the ETS Directive. When it comes to the uptake of EVs, a study conducted in Norway shows that 41% of EV buyers quoted cost-saving as primary reasons for buying an EV. The Norwegian government has successfully rendered the purchase of an EV a 'cost-saving' opportunity by implementing a generous package of financial incentives to EV buyers, including: **exemptions from purchase tax and VAT; exemptions from road and ferry tolls; free parking in public charging spots; more affordable insurance; free-recharging from thousands of points across the country; and the ability to drive in bus lanes.** In order to enable the replication of such government incentive systems and drive electromobility forward in (less wealthy) EU Member States Bellona calls for the creation of an **EU-wide funding mechanism.**

Ensuring the timely and ambitious implementation of the AFI Directive:

Bellona welcomes the adoption of the Alternative Fuels Infrastructure (AFI) Directive, which sets common technical standards for the building of re-charging stations for EVs as well as a minimum number of re-charging stations per Member State, as a first and important step in boosting consumer confidence and overcoming the 'range anxiety' barrier to EV uptake. The creation of an EU-wide market for EVs instead of fragmented national ones is crucial in further lowering costs and helping to eliminate consumer anxieties. Bellona, however, urges the European Commission to ensure that MS-prepared National Plans (as mandated by the AFI Directive) incorporate measures to promote **smart charging** of EVs so as to allow them to effectively integrate into the power system and facilitate the reliability of supply and smooth EV mobility. Moreover, Bellona calls on the Commission to ensure that only EV **re-charging stations fuelled by renewable energy sources** are being constructed, in order to ensure that the uptake of EVs truly contributes to transport sector decarbonisation. In order to render EVs a viable alternative to Internal Combustion Engine (ICE) cars it is important that an adequate number of fast-charging stations are constructed to ensure inter-urban mobility. The construction of EV re-charging stations should be supported by an EU-wide funding mechanism for the transport sector (see above).

Ensuring a more holistic approach to EU transport electrification:

The Energy Union Strategy gives impetus to the need to speed up the electrification of car fleet and other means of transport for the EU to become a leader in electromobility and energy storage technologies. Bellona agrees that in addition to the car fleet, **focus should be placed on the electrification of other means of transport, including road and sea freight transport, and that in general more of the transport of goods should be moved from road to sea.** This is of crucial importance as it is during these longer distances that the majority of oil is consumed and CO₂ emitted. This can be attained via a number of measures including the exemption from VAT on battery-powered ships, and a revision of fees applicable to companies

transporting goods by sea compared with trucks and trailers. The EU's Energy Union strategy, however, misses the 'inter-urban' element of electrification. Bellona therefore calls on the Commission to take into account the **need for fast-charging stations** – an absolute necessity to rendering EVs a viable alternative to ICE cars.

Ensuring that the transport sector remains outside the EU ETS:

The 2030 Climate and Energy Package includes a possibility to include the transport sector in the EU ETS. Bellona opposes such a move and believes that it would have negative implications for reducing CO₂ emissions from transport and for moving electromobility forward in general. **Inclusion of transport under the ETS would delay and reduce the rate of emissions reductions in transport**, while endangering the attainment of climate and energy security objectives. It would also act to undermine the adoption of more effective, climate specific policies targeted at transport, such as emission performance standards and clean fuel standards, which can stimulate investment in cleaner-fuel vehicles, and attain transport decarbonisation quicker. What is more, inclusion of the transport sector under the ETS would act to weaken the ETS and increase its costs.

Limiting flexibilities under the ESD:

The 2020 targets in combination with the possibility of overgenerous use flexibilities have proven insufficient to drive emission reductions in ESD sectors so far. The 2030 Package does not allow for the use of international offsets from reductions in developing countries, but to compensate for this lack of international flexibilities, it was agreed that current intra-EU trading options would be enhanced allowing transfers between MS and sectors to ensure that the most cost-effective mitigation measures are taken first. MS are also granted the flexibility to use EU ETS allowances (i.e. EUAs) to meet targets in non-ETS sectors. This, however, could be counterproductive and act to disincentivise emission reductions in non-ETS sectors. This is because the price of EUAs has been much lower than the carbon price required to enable reductions in the transport sector for instance.

Building on the Californian example – in terms of vehicle emission performance standards and energy storage regulations:

When revising the emission performance standards set out in Regulation (EC) 443/2009, the Commission should build on the Californian Zero Emission Vehicle (ZEV) programme, where manufacturers have been granted flexibility in meeting their vehicle CO₂ performance targets. Car manufacturers should be allowed to exchange and trade their emission permits in order to meet their targets more cost-effectively. What is more, **Bellona calls on the EU to consider the US efforts in promoting energy storage technologies**, the importance of which is recognised in both the EU Energy Security Strategy and the Energy Union Strategy. In 2013 California

introduced the US's first ever regulation mandating the state's utilities to buy over a gigawatt of energy storage services by 2020.

III. Capacity building and other support to implementation at national, regional and local level

The EU and the European Commission are supporting the implementation of the current Effort Sharing Decision through, inter alia:

- Projects financed through the European Structural and Investment Funds, as well as other initiatives to build capacity and exchange best practices;
- Regional workshops on implementation, to facilitate exchange of best practice and experience with national policies and measures among Member States; and
- Annual guidance to Member States in the European Semester.

The European Commission's Climate Change Committee and its Working Groups is an important forum for exchange with Member States' administrators and experts on implementing measures at national level.

Q3. Is there a need for additional EU action in terms of capacity building and similar support targeted at the regional and local level (in addition to European Structural and Investment Funds; regional workshops and annual guidance to MS in the European Semester) to facilitate national policies and measures under the ESD after 2020? If yes, what kind of additional support do you have in mind?

Bellona calls for additional financial and capacity building support to be provided by the European Commission in the form of:

- Establishment of an EU-wide funding mechanism to unlock additional reductions in ESD sectors. Financial support to MS is crucial when it comes to building re-charging infrastructure and electrification of the transport sector.
- Further sources for financial support could be the Cohesion Funds, Connecting Europe Facility (CEF), and Horizon 2020 programmes.
- The soon-to-be-established Sustainable Transport Forum (STF) could serve as a medium for exchange of best practices; and should take into account above recommendations regarding the implementation of the AFI Directive, i.e. MS' National Plans to incorporate measures to promote smart charging of EVs; and Commission to ensure that only EV re-charging stations fuelled by renewable energy sources are being constructed, in order to ensure that the uptake of EVs truly contributes to transport sector decarbonisation.