



**The Joint Declaration of Intent for the INNOVATION DEAL
on "From E-Mobility to recycling: the virtuous loop of the
electric Vehicle"**

**This Joint Declaration of Intent ("JDI") is between the following
Participants:**

**The European Commission, hereinafter referred to as 'the
Commission', represented for the purposes of signature of this JDI
by**

- Commissioner Carlos Moedas for Research, Science and Innovation
- Commissioner Karmenu Vella for the Environment, Fisheries and
Maritime Affairs

Public Authorities

NATIONAL AUTHORITIES

- The Ministry for the Ecological and Inclusive Transition (France),
represented for the purposes of signature of this JDI by Nicolas Hulot,
The Ministre d'État, Minister for an Ecological and Solidary transition
- The Ministry of Economy and Finance (France), represented for the
purposes of signature of this JDI by Delphine Gény-Stephann,
Minister of State, attached to the Minister of Economy and Finance

- The Ministry of Infrastructure and Water Management (The Netherlands), represented for the purposes of signature of this JDI by Stientje van Veldhoven -van der Meer, State Secretary for Infrastructure and Water Management
- The Ministry of Economic Affairs and Climate Policy (The Netherlands), represented for the purposes of signature of this JDI by Mona Keijzer, State Secretary for Economic Affairs and Climate Policy

REGIONAL AUTHORITY

- The Province of Utrecht (the Netherlands), represented for the purposes of signature of this JDI by Pim van den Berg, Regional Minister for Energy Transition

Innovators

- Renault s.a.s (France), represented for the purposes of signature of this JDI by Jean-Philippe Hermine, Vice-President Strategic Environmental Planning, Groupe Renault
- Bouygues (France), represented for the purposes of signature of this JDI by Servan Lacire, Director Innovations & Technologies
- Lomboxonet (The Netherlands), represented for the purposes of signature of this JDI by Robin Berg, Director

1. Introduction

1. To maintain our prosperity for future generations, it is necessary to strengthen our economic competitiveness and simultaneously promote low-carbon development, enhance our resilience to climate change impacts and reduce the burden on the environment and our reliance on fossil energy and scarce raw materials.

2. Creativity, entrepreneurship and innovation are essential to enable a transition to green growth. Businesses, citizens and civil society organisations carry out many concrete initiatives to make the economy and society greener and create jobs and sustainable growth in the process.
3. The Circular Economy concept is a response to the aspiration for sustainable growth in the context of the growing pressure of production and consumption on the world's resources and environment. It can boost the European economy and competitiveness by bringing new business opportunities as well as innovative and more efficient ways of producing and consuming. The transition towards a circular economy gives us an opportunity to reinvent our economy and create new competitive advantages for Europe built on a sustainable base.
4. Appropriate framework conditions, such as modernised regulatory frameworks and adequate financial instruments, are a prerequisite for the development and successful uptake of innovative solutions.
5. Innovation Deal ("ID") is an instrument that can be used at the initiative of innovators, designed to bring together innovators, national/regional/local authorities in Member States and the Commission in a voluntary, cooperative, open and transparent exercise with the aim to study in-depth whether any perceived regulatory barriers exist in reality in EU legislation or Member States implementing measures that hinder innovative commercial or industrial development in the Circular Economy. The ID cannot create derogations from existing EU legislation but may identify possible solutions making innovative use of the flexibility already allowed in such legislation.
6. The concept of ID has been launched in the Commission Communication "Closing the loop - An EU action plan for the Circular Economy" (COM(2015) 614/2). The Communication introduces the concept of Innovation Deals as «a pilot approach to help innovators facing regulatory obstacles (e.g. ambiguous legal provisions), by setting up agreements with stakeholders and public authorities». This pilot phase is therefore an opportunity for the Commission to test this new approach in

real life conditions and it presents an important opportunity to learn about the practical implications.

2. Specific conditions

2.1 Context

Transport is the only sector where greenhouse gas emissions are currently still increasing globally¹.

The COP 21 Paris agreement² recommendations, limiting the maximum total rise of average global temperatures to well below 2°C as well as EU regulations³ on polluting emissions, require steep change in our transport emissions patterns accelerating the take up of amongst others zero-emission vehicles. Electric vehicles⁴ are one of the ways through which Europe can shift towards a more sustainable, progressively⁵ decarbonized transport system in the near future, contributing to the achievement of societal objectives on fuel economy, on reduction of greenhouse gas emissions, pollutants and noise and, efficient use of resources.

However, the uptake of electric vehicles in the EU, despite its potential considerable positive contribution towards a more sustainable transport system, is slow. Sale rates of electric vehicles in the EU are lower than those in the US and China. Several reasons may contribute to explaining this, including the high cost of propulsion batteries and the limited availability of charging stations. There is wide consensus among consumers, policy makers, public authorities, industrial operators and retailers that if the total ownership cost of batteries was lowered, the market share for electric vehicles would increase. Scientific research, technical developments and scale effects are expected to continue to lower this cost.

¹ https://ec.europa.eu/clima/policies/international/paris_protocol/transport_en
<https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>
<https://www.eea.europa.eu/highlights/eu-greenhouse-gas-emissions-from-transport-increased>

² http://unfccc.int/paris_agreement/items/9485.php

³ <http://ec.europa.eu/environment/air/transport/road.htm>

⁴ Unless otherwise specified, “electric vehicles” comprises Hybrids Vehicles (HEVs), Plug-In Hybrid Electric Vehicles (PHEVs) and Battery Electric Vehicles (BEVs).

⁵ As electricity generation gets progressively less carbon-intensive.

Propulsion batteries in electric vehicles are based on advanced technologies and their manufacturing is costly. At present, contrary to many other technologically advanced products, the economic viability of recycling electric vehicle batteries and the materials they contain is still questionable. The currently observed increased interest in the re-use of these batteries at the end of their life e.g. in decentralised energy storage applications or again as propulsion batteries, offers ways to maximize the recovery of initial investment. Moreover, they could allow the development of new revenue streams for manufacturers and users that should result in lower prices of batteries and vehicles.

Also in some cases, owners of electric vehicles could opt to keep their vehicle but upgrade their batteries to more efficient ones. This would imply an electric vehicle could remain in use for longer.

2.2 Issues at stake

The Circular Economy Package aims at promoting waste prevention, through amongst others the re-use of products and the marketing of products that are suitable for multiple uses. The ID is fully in line with this goal, since it is looking into the possibility of propulsion batteries' re-use, in particular but not exclusively as stationary energy storage systems.

At the end of their lifespan, propulsion batteries could be considered waste batteries and their management would fall within the remit of relevant EU legislation on waste⁶, in particular as regards their recycling.

Propulsion batteries, however, contain only minor amounts of easily recyclable and valuable materials, which reduce economic interest to process them. Moreover, propulsion batteries embed relevant amounts of so-called Critical (and nearly Critical) Raw Materials⁷ that are not always recovered well. Refurbishing or repurposing and second use applications should in principle be cost effective, or even profitable, depending above all on the gains obtained using these (repurposed or refurbished) batteries, on the cost of disassembly and remanufacturing, and on the differences in cost with production-new equally performant batteries. Furthermore, they also should in principle be

⁶ In particular, Directives 2006/66/EC on batteries and accumulators and waste batteries and accumulators (OJ L 266, 26.9.2006, p. 1) and 2000/53/EC on end-of life vehicles (OJ L 269, 21.10.2000, p. 34)

⁷ As defined in COM(2014) 297

environmentally favourable and resource efficient. In any event, these batteries should be checked and qualify for second use types before they can enter their second-life production stream.

There are no specific provisions at EU level dealing with the second-life of propulsion batteries and, therefore the general ones on waste apply, e.g. those laid down by the EU Waste Framework Directive⁸ and the Batteries Directive⁹.

Likewise, the modalities of applying the extended producer responsibility for the collection and recycling of waste batteries as required by the EU legislation may need to be clarified in situations where the product, propulsion batteries in this case, has a second-life. Making the initial producer responsible for the costs of collection, treatment and recycling of the batteries at the end of their second-life would, in the opinion of the innovators, represent an obstacle to the development of second life applications.

The re-use of batteries in electric grids, mostly as decentralized storage systems, constitutes an avenue to explore. However, the technical and economic feasibility of this still needs to be demonstrated at scale. There is also some uncertainty whether the current regulatory framework on energy and electricity markets (at EU and national levels), actually promotes such type of use.

2.3 Scope of the Innovation Deal

The ID focuses on propulsion batteries and will assess whether existing EU legal provisions and the transposition to national or regional law hamper the use of batteries in a second-life application or otherwise discriminate any technology that might be necessary for second-life applications.

In this context a number of regulatory frameworks will have to be looked at.

For the waste part:

- Waste management: definition of waste, classification of batteries differences between "preparation for reuse" and "reuse, extended producer

⁸ Directive 2008/98/EC, OJ L 312, 22.11.2008, p. 3-30

⁹ The assessment of the application to 2nd life batteries of some concepts and provisions defined by the Waste Framework Directive (2008/98/EC, OJ L 312, 22.11.2008) such as re-use (Art. 3.13), preparing for re-use (Art. 3.16) or waste prevention (Art. 3.12), as well as those established by the Batteries Directive (2006/66/EC, OJ L 266, 26.9.2006), such as industrial batteries (Art. 3.6), waste battery (Art. 3.7) or the obligations for producers (in Art. 8) will, inter alia, take place.

responsibility", "waste hierarchy (justified by life cycle thinking)".

- Internal market: second-life of products, liabilities and warranties, safety of reuse.

For the energy part:

For the energy storage and grid integration area, the ID will specifically and only provide recommendations on possible national / regional/ local prevailing regulatory barriers to the second use of propulsion batteries for energy storage.

In this context, the national, regional as well as the local regulatory frameworks relevant for, but not limited to electricity market design, fees applied to storage systems, self-consumption or smart metering will be assessed.

The Innovation Deal will not provide recommendations on any EU legislative provisions that are currently under revision.

2.4 Objectives

The objective of this ID is to contribute to a more environmentally and industrially efficient use of propulsion batteries and the connective positive effects on transport electrification and grid economy balance.

This ID will explore and analyse:

- The existence of possible legislative and regulatory barriers at EU and national level to the use of propulsion batteries in a second-life application.
- Possible ways to overcome these barriers, evaluating their feasibility and if considered necessary, proposing options to implement them.

The exchange of information as regards to possible barriers to innovation affecting the use of propulsion batteries for second-life applications will also target the following initiatives:

- Batteries' Temporary Working Group of the European Strategic Energy Technology-Plan (SET- plan)¹⁰.

¹⁰ Action 7 of the Strategic Energy Technology Plan aims at supporting the development and demonstration of technologies, manufacturing processes, science-based standards and regulations, to increase performance and safety and reduce overall costs of battery systems used for storage purposes in the automotive and other sectors.. As a first step, a Declaration of Intent agreed between industry stakeholders, Member States and the Commission in 2016 set battery performance, cost, manufacturing and recycling capability targets with

- BRIDGE Horizon 2020-initiative¹¹.
 - Smart Solar Charging initiative in the Province of Utrecht (The Netherlands).
- Tasks to be developed and additional stakeholders and partners involved in them, milestones, deliverables and communication strategy will be defined in a work plan prepared by the Commission which will be decided upon by the Steering Committee within two weeks after signing this JDI.

2.5 Actions for the Commission

- To prepare and submit a work plan for the ID for consideration by the Steering Committee.
- To provide support to analyse relevant EU legislation.
- To support the contacts and trust-building with the other Participants of the ID, including public authorities in the relevant Member States in full respect of the subsidiarity principle.
- To facilitate the follow up of the process of the ID along with the Coordinator of the Public Authorities and the Innovators.
- To provide a central point within the Commission on the requests concerning the ID.
- To share information with the other Participants during the ID lifetime. This does not include sensitive data.
- To contribute to the active dissemination of the outcomes.

2.6 Actions for the Public Authorities

- To actively engage with the Commission and with the other Participants to provide clarification on transposed EU legislation and/ or to explore the possibility to make use of existing flexibility in the relevant EU legislation to allow for testing or demonstration of the innovative solution proposed in the ID.
- To share information with the other Participants during the ID lifetime. This does not include sensitive data.

time horizons of 2020 and 2030. A dedicated Temporary Working Group currently works on an implementing plan for these targets which will include up to 10 actions.

¹¹ The BRIDGE initiative aims at providing the Commission with a number of recommendations in the field of grid and storage integrations. Members of BRIDGE are H2020 projects in different fields of activity. The ELSA project that is part of the BRIDGE initiative works in the area of the re-use of propulsion batteries in the field of local energy storage connected to renewable energies.

- To share and disseminate the outcomes of the ID to support EU added value. This does not include any sensitive data.
- To be prepared to learn lessons and to gain experiences from this ID. At the national level, the outcomes of the ID will be seen as relevant input for policy making and regulation in the field of energy, electric mobility, smarter grids, bi-directional grid-battery interface and for the deployment of battery storage in the energy system. The aim is to further boost smart charging of electric vehicles, throughout EU Member States, and enable electric vehicles to support the grid infrastructure and thus contribute to the speedup of the renewable energy system transition.

2.7 Actions for the Innovators

- To actively engage with the objectives and activities of the ID.
- To make available the resources needed for their participation in the implementation of the ID.
- To share information with the other Participants during the ID lifetime. This does not include sensitive data.
- To share and disseminate the outcomes of the ID to support EU added value. This does not include sensitive data.

2.8 Actions for the Coordinator of Public Authorities and Innovators

The Steering Committee will assign the role of the coordinator of Public Authorities and Innovators to a selected participant of the ID. The tasks of the coordinator will include:

- To coordinate communication between the Public Authorities and the Innovators.
- To facilitate the follow up of the process of the ID along with the Commission.
- To take the initiative to start actions and activities on behalf of the Innovators in cooperation and with the consent of the Commission and the Public Authorities within the ID.
- To monitor the progress of the ID, the tasks of the Participants and summarising them for record tracking.
- To prepare a 'Report of Activities' (paragraph 2.9).

2.9 Expected results

The Commission, in cooperation with the Public Authorities, will produce the 'ID Report'. It will contain an in-depth analysis of the alleged regulatory obstacles to innovation put forward by the Public Authorities and the Innovators in relation to waste and batteries. This analysis is not a binding interpretation of the legislation analysed and is always subject to the final word of the Court of Justice of the European Union, the only institution that is solely competent for the interpretation of EU law.

This analysis does not commit the Commission to undertake any course of action whatsoever after the ID is finished. This analysis may nevertheless be considered by the Commission as a source of information, and could lead to launching further evaluation, consultation and assessment of the impact of identified regulatory obstacle(s), outside the framework of this ID. This could be done by making use of the EU Better Regulation Guidelines¹².

The Coordinator of the Public Authorities and the Innovators will prepare a 'Report of Activities' carried out within this ID, specifying the different phases and the results obtained, and submit it for discussion and approval by the Steering Committee. The 'Report of Activities' will be annexed to the 'ID Report'.

For the energy legislation part, the 'Report of Activities' will only include the analysis on possible national/regional legislative barriers put forward by Innovators'.

3. Lack of legal effects

This JDI does not create any rights or obligations under international, EU or national law. This JDI does not create any private or public body.

4. Execution and compliance with EU legislation.

This JDI will be implemented within the frame of the European Union legislation, particularly to the extent that these actions fall within the scope of EU rules such as on public procurement, competition as well as any standards and technical EU regulations.

¹² https://ec.europa.eu/info/law/law-making-process/better-regulation-why-and-how_en#documents

Any proposed innovation by the Innovators based upon a flexible interpretation of the regulatory framework will not violate any EU or national legislation and must not infringe and/or jeopardise any environmental, social or competition principles.

5. Steering Committee

The Steering Committee will have the following composition and functions:

- All Participants that signed the JDI will have a representative in the Steering Committee.
- The implementation of this JDI will be supervised by the Steering Committee.
- The Participants will jointly decide to disclose the relevant information to the Steering Committee.
- Without prejudice of the previous five paragraphs, the representatives of the Participants within the Steering Committee may further jointly decide on additional functions and procedures of this Steering Committee.

6. Innovation Deal lifetime

The ID will be completed within a maximum of 18 months after the signature of this JDI. The lifespan of an ID is divided in three phases. Each phase cannot exceed the duration in months as indicated below but it can be shortened. At the end of each phase the Commission will discuss with the other Participants if the necessary conditions for this ID are still met and, if it is not the case, may decide unilaterally to terminate the ID. The necessary communication actions will be defined in the work plan.

6.1 Early life (month 6)

As soon as the JDI is signed, all Participants will complete the collection of the necessary information and perform a thorough study of the relevant perceived regulatory barriers. This study should include an assessment of how any legislative and regulatory system may affect the market uptake of the innovation and of its relative importance compared to possible other barriers.

The absence of appropriate enabling regulation should also be considered. The Participants will strive to consult the analysis with all relevant stakeholders. The study should represent the general understanding of what is/are exactly the

barrier(s) that is hampering innovation. Other possible issues may be identified in the 1st phase of the ID and analysed subsequently during the lifetime of the ID.

The outcomes of this phase will be summarised in the "Report of Activities".

6.2 Intermediate review (month 12)

Possible options for solutions to overcome the indicated barriers will be assessed by all Participants. The assessment will explain how the options address the barrier, what the impacts and consequences may be, including the economic and environmental impacts, and which stakeholders may be affected. The Participants will strive to consult the assessment with all relevant stakeholders or describe the point of view of these stakeholders on the identified options.

The outcomes of this phase will be summarised in the "Report of Activities".

6.3. Conclusion and outcomes (month 18)

In this phase the Coordinator of Public Authorities and Innovators will produce the 'Report of Activities' that will include summary of the alleged legislative and regulatory barriers (1st phase) and of the assessment of possible options for solutions to overcome the indicated barriers (2nd phase), and other possible results or activities carried out during the lifetime of the ID.

The "Report of Activities" will be annexed to the 'ID Report'.

Each Participant acknowledges and accepts that it is also possible that the in-depth analysis has as outcome a lack of solution for the barrier to the innovation.

However, if the evidence gathered confirms the existence of (an) innovation barriers, the Commission may consider launching further evaluation, consultation and assessment of the impact of this regulatory obstacle outside the framework of this ID. This could be done by making use of the EU Better Regulation Guidelines.

7. Intellectual property rights / Sensitive information

Intellectual property rights will be fully respected and confidential information not disclosed but information on the IDs and their outcomes will be kept open,

transparent and sufficiently generic in order not to interfere with technology development or to give competitive advantage to a single entity.

Each Participant will declare which sensitive information has to be removed from the documents to be published.

8. No funding

IDs are an initiative undertaken on a voluntary basis. No requests for funding of an ID will be taken into consideration. All Participants participate at their own costs.

9. Assessment and monitoring

Specific monitoring and evaluation criteria and activities relevant to the ID are defined in the work plan, with the involvement of the Commission services responsible for the evaluation and monitoring. At the end of each phase the Steering Committee will meet to assess the progress.

10. Modifications

Each of the Participants may ask in writing, with a notice of at least six weeks, to the other Participants to change the terms of the JDI. Such amendment requires the written consent of all Participants.

11. New Participants

New Participants may join this JDI.

Any new Participant will submit a proposal for a declaration of intent including its actions and commitments in writing to the Steering Committee of this ID.

The Steering Committee will examine the proposal and will decide by consensus about the accession of the new Participant.

The new Participant will accede by signing its declaration of intent which will form an integral part of this JDI.

12. Termination

Each Participant is entitled to withdraw at any time from the ID, subject to a written notice period of 3 months.

13. Start of work

This JDI becomes effective on the day following its signature by all Participants. It is concluded for a period of 18 months after signature.

Participants will ensure that the actions mentioned in this JDI are implemented as soon as possible.

14. Publication

This JDI will be published on the website (<http://ec.europa.eu/research/innovation-deals/index.cfm>).

The outcomes, the process, names of Participants and the activities will be made publicly available. The outcomes and lessons learned will be disseminated in an open and transparent way.

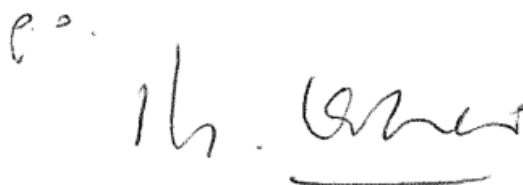
Agreed and signed in 10 copies

Done in Brussels, 12 March 2018

For the European Commission



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Karmenu Vella
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**For the National/Regional
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