



#H2020Energy

Horizon 2020 Work Programme for Research & Innovation 2018-2020

Smart, green and integrated Transport Work Programme 2018-2020

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Research and
Innovation

Energy related topics in Transport:

- Electrification
- Increasing Energy Efficiency

... but also

automation, safety, competitiveness, logistics, new mobility systems, socioeconomics of transport

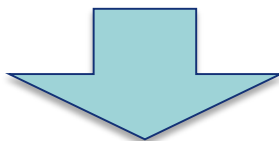


Energy related topics in Transport:

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1. Call "Green Vehicles"

2. Call "Mobility for Growth"

3. Related calls in NMBP*

**Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing WP*

Green Vehicles 2018-2019-2020

Estimated Total EU Contribution: EUR 246 Million

| | Topic title | Year | Type of action |
|---------------|---|-------------|-----------------------|
| LC-GV-01-2018 | Integrated, brand-independent architectures, components and systems for next generation electrified vehicles optimised for the infrastructure | 2018 | IA |
| LC-GV-02-2018 | Virtual product development and production of all type of electrified vehicles and components | 2018 | RIA |
| LC-GV-03-2019 | User centric charging infrastructure | 2019 | IA |
| LC-GV-04-2019 | Low-emissions propulsion for long-distance trucks and coaches | 2019 | IA |
| LC-GV-05-2019 | InCo flagship on "Urban mobility and sustainable electrification in large urban areas in developing and emerging economies | 2019 | IA |
| LC-GV-06-2020 | Next generation and realisation of battery packs for BEV and HEV | 2020 | To be defined |
| LC-GV-07-2020 | Advanced light materials and their product processes for automotive applications | 2020 | To be defined |
| LC-GV-08-2020 | Reducing the environmental impact of hybrid light duty vehicles | 2020 | To be defined |
| LC-GV-09-2020 | Next generation electrified vehicles for urban use | 2020 | To be defined |

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Call "Green Vehicles" 2018-2019

LC-MG-01-2018

Integrated, brand-independent architectures, components and systems for next generation electrified vehicles optimised for the infrastructure

Development of new components, systems and architectures required for the next generation of electrified vehicles to meet end-users expectations in terms of cost, convenience of long range travel and comfort, by finding for each application the best compromise between fast charge, battery size and battery life.

LC-GV-03-2019

User centric charging infrastructure

Address availability, convenience, performance and costs of the necessary EV charging infrastructure. Support the accelerated deployment of recharging infrastructure in cities and to support occasional ultrafast charging for long range travel.

LC-GV-05-2019

Urban mobility and sustainable electrification in large urban areas in developing and emerging economies (InCo flagship)

Bring together international stakeholders to foster participatory engagement in urban electrification in order to reduce air pollution and CO2 emissions. All types of vehicle are considered - powered 2 wheelers, cars, buses, trucks and LDV.

Call "Green Vehicles" 2020

| | |
|---------------|--|
| LC-GV-06-2020 | Next generation and realisation of battery packs for BEV and HEV |
| | |
| LC-GV-09-2020 | Next generation electrified vehicles for urban use |



2. Call "Mobility for Growth" 2018-2019

| | |
|--|---|
| LC-MG-1-5-2019 | Advancements in aerodynamics and innovative propulsion systems for quieter and greener aircrafts |
| <i>Results shall contribute to ultra-efficient, more silent, regional, short-haul or long-haul commercial transport aircraft to decrease noise and environmental impact of aviation</i> | |
| LC-MG-1-6-2019 | Aviation operations impact on climate change (InCo Flagship) |
| <i>Deliver scientifically founded and globally harmonised policy, regulations and operational improvements to support climate-friendly flight operations</i> | |
| LC-MG-1-7-2019 | Future propulsion and integration: towards a hybrid/electric aircraft |
| <i>Perform feasibility design studies for aircraft energy system with integrated hybrid/electric propulsion and power generation architectures</i> | |
| LC-MG-1-8-2019 | Retrofit Solutions and Next Generation Propulsion for Waterborne Transport |
| <p><i>Passenger ship powered primarily by high power fuel cells and in combination with a combustion engine or turbine</i></p> <p><i>Next generation high efficiency propulsion systems for ships using electrification and or clean fuels and or renewable energy sources/high efficiency or renewable energy assistance propulsion systems</i></p> <p><i>Retrofitting solutions for waterborne transport</i></p> | |

3. Related Calls in NMBP

| | |
|---|---|
| LC-NMBP-27-2019 | Strengthening EU materials technologies for non-automotive battery storage |
| <i>Develop more price competitive, better performant and highly safe battery storage solutions, with improved lifetime by lowering the cost and capital expenditure</i> | |
| LC-NMBP-30-2018 | Materials for future highly performant electrified vehicle batteries |
| <i>Development of new or significantly improved materials and/or chemistries to optimise the battery cell and its components, with features clearly beyond the state-of-the-art technologies that are currently used in commercial cells for automotive applications</i> | |
| Horizon Prize | Innovative Batteries for eVehicles |
| <i>To develop a safe and sustainable battery for electric-vehicles which provide the same or better performance than vehicles with internal combustion engines and to be capable of recharging the electric vehicle within a time equivalent to fill a conventional gasoline/diesel fuel tank</i> | |

For more information:



Transport Work Programme:

<https://ec.europa.eu/programmes/horizon2020/en/shaping-work-programme-2018-2020-societal-challenge-4-smart-green-and-integrated-transport>

Thank you!

#EUTransportResearch

<http://ec.europa.eu/research/transport>

