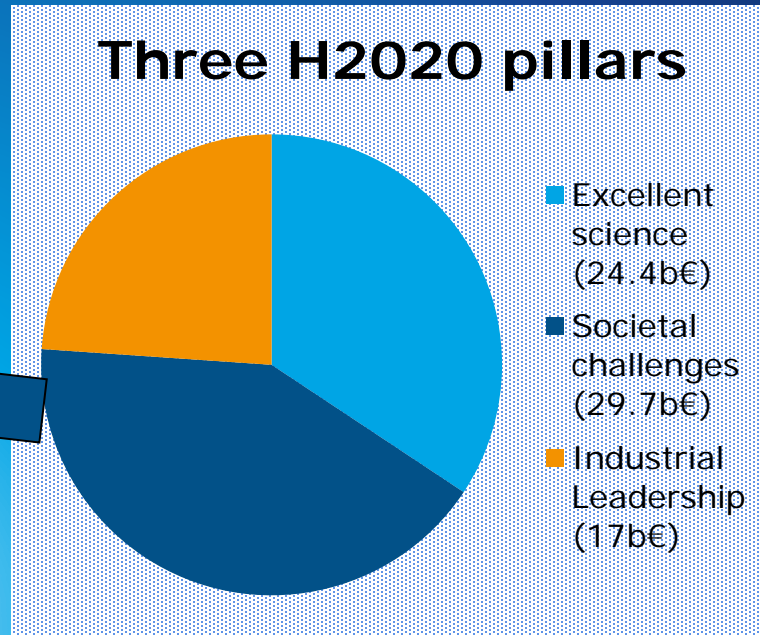
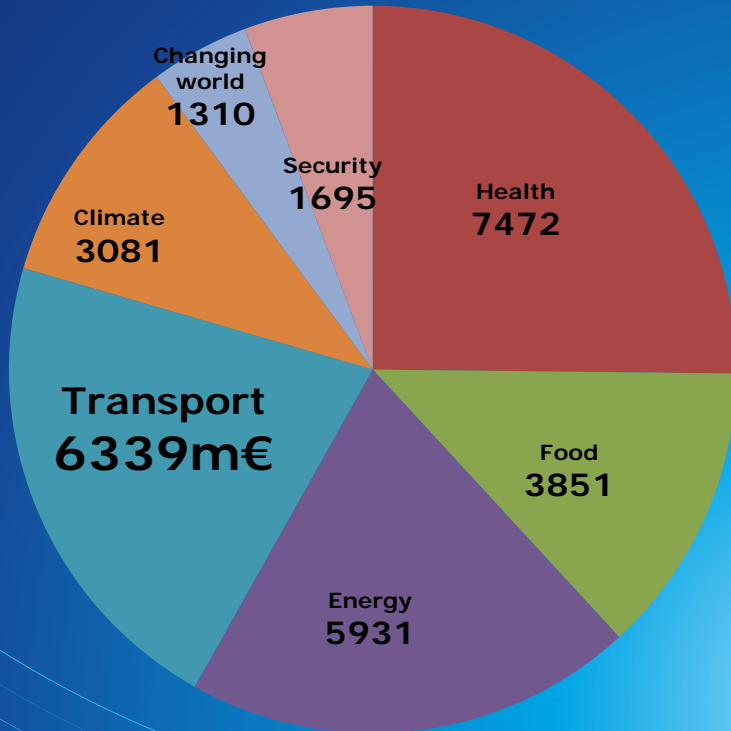




EU RESEARCH POLICY IN THE TRANSPORT SECTOR

Robert Missen
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DG Mobility & Transport
European Commission

Horizon 2020 for transport



H2020 Work Programme 2018-2020



Transport Policy Goals

H2020 Policy Priorities

Resource **efficient transport** that respects the environment

Increased investment in **sustainable development** and **climate** related R&I

- *35% of budget to climate actions*
- *60% of budget to sustainable development*

Better mobility, less congestion, more safety and security

Integrating **digitisation** in all industrial technologies and societal challenges

- *Digital Single Market Strategy*

Global leadership for the European transport industry

Strengthening **international R&I cooperation**: *30 Flagships to ensure scope and scale in targeted areas*

Socio-economic and behavioural research & forward looking activities

Resilience to **societal concerns**: *security and migration*

Horizon 2020: Open to the World



- ✓ **General openness:** Projects can include international partners (participant or third party)
- ✓ **Targeted opening:** In certain topics in calls for proposals, inclusion of international partners may be encouraged or required
- ✓ **Cooperation at programme level**



Implementing the programme: WP calls and large initiatives

➤ **Collaborative**
calls for project proposals
in H2020 work programme

➤ EUR 945 mio in 2018-2020

budget
~50%

WP

➤ **Innovation**
investment package

- Clean Sky Joint Undertaking
- SESAR JU
- Shift2Rail JU
- Fuel Cells&Hydrogen JU

~50%

JUs



@Transport_EU

Mobility and
Transport

CONNECTING
EUROPE



Research
RIA

Innovation
IA

H2020 Transport
EUR 6bn

**Supporting
Actions**

CSAs, SME, InnovFin, ERA-NET, etc.

"Valley of death" from R&I to Deployment

CEF Transport
EUR 24bn

Deployment
CEF

**Market
take-up**
CEF Innovation



Innovation and Research in Transport



global competition

energy efficiency

CO₂ + GHG emissions

New fuels

air quality

noise

circular economy

Digitalisation and new mobility services



Infrastructure

Logistics

Socio-economic

system performance

Transport capacity

Changing demographics

multimodality

accessibility

safety

security

sustainability



WHY A NEW TRANSPORT R&I AGENDA?

- **The 2015 Energy Union communication defines the strategy to attain the 2030 Climate & Energy targets:**

at least 40% GHG emission reduction, 27% of renewable energy, 27% improvements in energy efficiency.

- **The strategy is based on five dimensions:**
 1. Energy security, solidarity and trust
 2. A fully integrated European energy market
 3. Energy efficiency
 4. Decarbonising the economy
 5. Research, Innovation and Competitiveness



DEVELOPMENT OF A STRATEGIC TRANSPORT RESEARCH & INNOVATION AGENDA

7 initial areas examined with experts and wider stakeholder community to:

- Identify **options** towards **low carbon** transport and mobility and an **integrated** transport system;
- Identify **options** to improve the **system's performance** (safety, security, competitiveness, environmental sustainability);
- Make best use of **digitalisation** and new **mobility/logistics solutions**;
- Identify need for **enablers** and framework conditions

1. Electromobility

- From framework conditions (recharging) to specific technologies (batteries, hybrid powertrains, range extenders); link to smart electricity grids



2. Alternative Fuels

- Renewable and non-renewable fuels; framework conditions, trade-offs and competitiveness;



3. Vehicle design and manufacturing

- Optimised processes, new materials and capabilities;



4. Connected and automated transport

- Technologies for vehicles /vessels as well as for the whole system;
- Data handling and cyber-security;



5. Infrastructure

- Enable transition to new functionalities and better system performance; better business models; lower costs for maintenance and operation of network;



6. Network and traffic management

- From better modal networks to Intelligent and dynamic cross modal / system-wide network and traffic management;



7. Smart transport and mobility services

- New, demand-based mobility services and logistics solutions; business models and impact on the system;
- Urban mobility and services





Create a mechanism to **ensure that STRIA roadmaps are implemented, monitored and updated:**

- Need to enable regular exchanges of Commission on STRIA with:
 - Researchers, industry, civil society and other stakeholders
 - Member States



Commission is already working on a future Transport R&I Monitoring and Information System (**TRIMIS**)



EU RESEARCH AFTER 2020

?

Brexit ?

**Three
pillars ?**

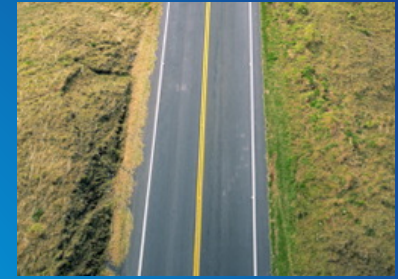
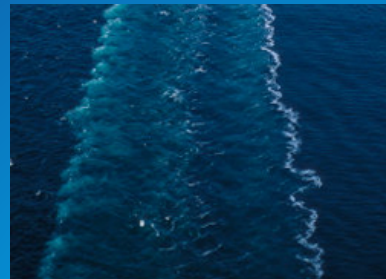
**Larger
Budget ?**

**Lamy
Report ?**

**Military
Research?**



Thank you for your attention!



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Find out more:

Learn more about Horizon 2020 <http://ec.europa.eu/horizon2020>

Learn more about current research projects <https://trimis.ec.europa.eu>

For future research policy: <http://ec.europa.eu/research/index.cfm>

Read the Lamy Report:

http://ec.europa.eu/research/evaluations/pdf/archive/other_reports_studies_and_documents/hlg_2017_report.pdf