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ETP 2010 Conference

Working together on societal challenges

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ERTRAC Chairman

Smaller footprints:

**Decarbonisation of the transportation
of passengers and goods**

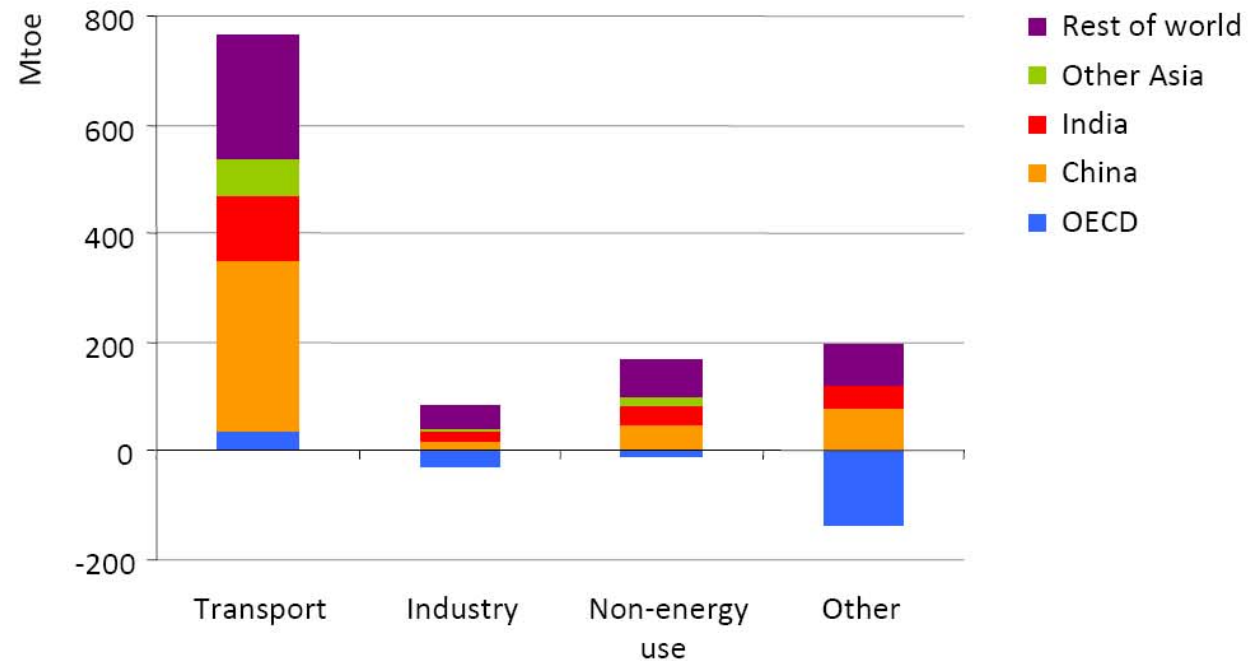


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Decarbonisation of transport is a major societal challenge



International Energy Agency: evolution of oil demand 2006-2030



Around three-quarters of the projected increase in oil demand comes from transportation



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Decarbonisation of transport is a societal challenge

Needs:

- **Increase the energy efficiency of transport**
- **Decarbonise the transport energies**
- **Increase the reliability of the transport system**

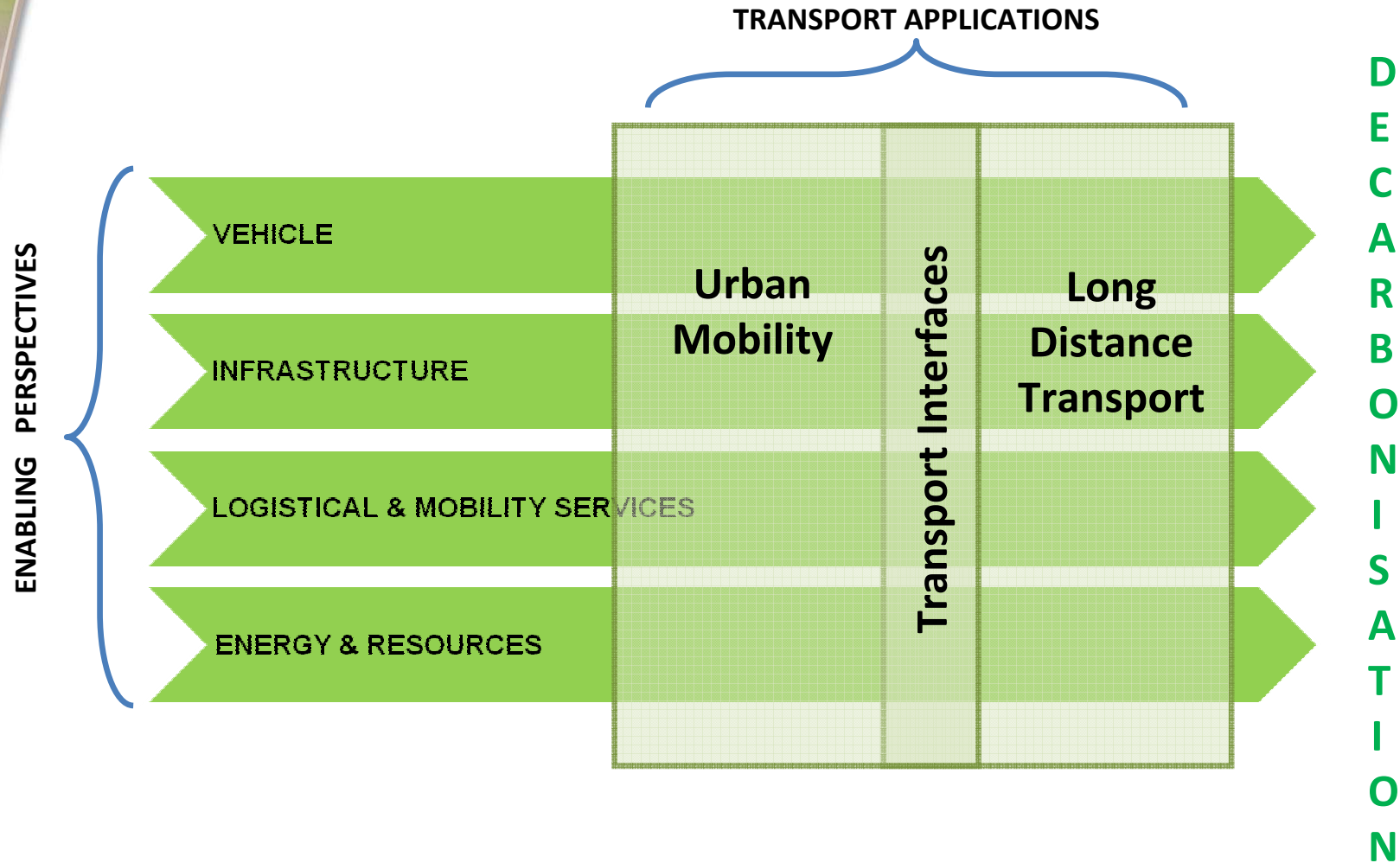
Impacts:

- **Climate change**
- **Energy security**
- **Air quality, Health**
- **Global competitiveness of EU industry**



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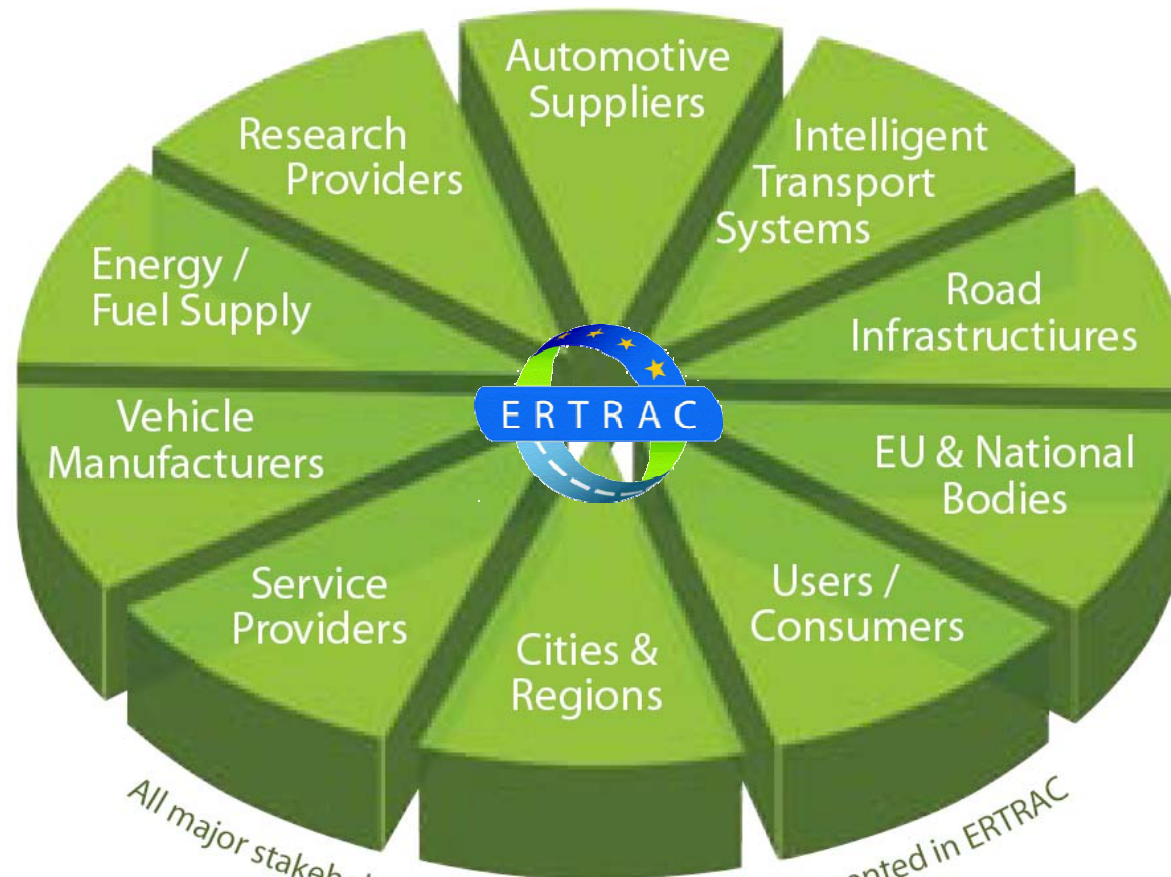
Decarbonisation of transport requests a system approach





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European Technology Platforms are multi-stakeholders partnerships able to deliver a system approach



All major stakeholders and public bodies are represented in ERTRAC



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Example of deliveries: research and innovation priorities for decarbonisation of road transport

Vehicles	Infrastructure	Logistical and Mobility services	Energy and Resources
<ul style="list-style-type: none">• Integrated Drivelines• Energy Management• V2V & V2I communications and cooperative systems• Electric Vehicles• Reduced resistance to motion• Advanced driver support systems (Semi) Automated systems	<ul style="list-style-type: none">• Advanced pavement and bridge materials• Efficient Infrastructure Maintenance & Reconstruction• Dynamic Demand Management• Integrated Mobility Planning• Multi-Modal Infrastructure and interfaces• Integrated Infrastructure Network Management	<ul style="list-style-type: none">• Integrated information services• Understanding users mobility behaviour• Integrated and optimised Logistics Services• Services at transport interfaces• Sustainable Mobility Services	<ul style="list-style-type: none">• Energy Storage & Battery systems• Biofuels Production• Advanced Fuels Production• Closed Loop recycling• Grid-Integration and Reliability• High Performance from Abundant Materials



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Several priorities for decarbonisation requests a whole transport system view, implying cooperation between transport technology platforms.

Example of deliveries:

- **Co-modality logistics**
- **Integrated information and services for the user**
- **Integrated networks management**
- **Cooperation and business models**



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Transport decarbonisation requests also cooperation beyond transport ETPs.

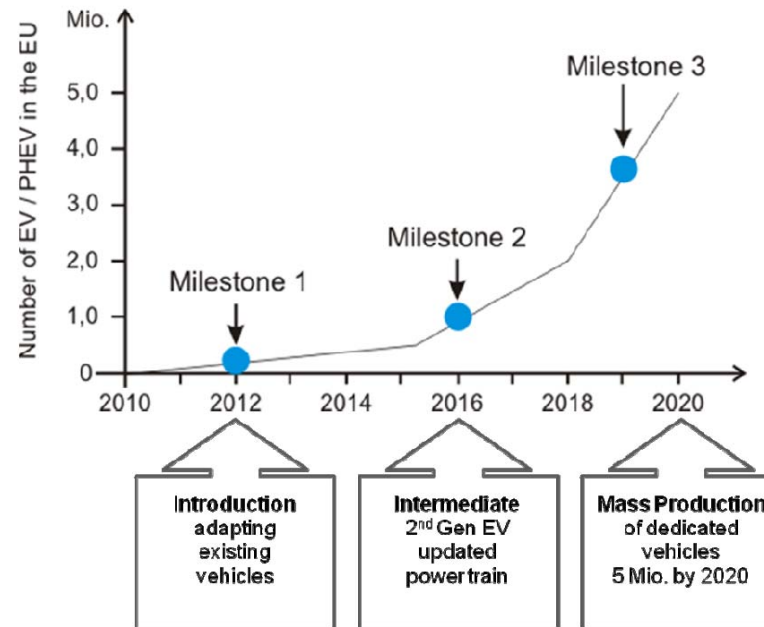
Example of electrification:

Cooperation between transport and energy sectors is crucial

Joint industrial Roadmap: Electrification of Road Transport

Key R&D topics:

- Energy Storage Systems
- Drive Train Technologies
- System Integration
- Grid Integration
- Transport Systems
- Safety





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Conclusions (1)

- Address R&D priorities shared by several ETPs
 - Co-modality topics for goods and passengers
 - Electrification of road transport
- Use specific instruments for key challenges like decarbonisation of transport
 - Public Private Partnerships
 - Simplified JTI's

Framework built for speed, effectiveness and efficiency

- Reflect the importance of the societal challenges by large scale and long-term instruments.



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Conclusions (2)

Keep in mind that transport decarbonisation is a societal challenge not only environmentally but also economically and socially, implying:

- Modification of industrial supply chains
- Transition of processes and manufacturing
- Evolution of skills and competences needed
 - Impact on EU global competitive position
 - Consequences on employment
- **Need for innovation and market uptake policies:**
 - Improve R&D implementation towards innovation
 - Set demand side measures by public authorities
 - Ensure timely standardisation