

**“ Cross-border Joint EU  
projects opportunities in  
the area of Transport  
and Logistics ”**

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# Objectives of the meeting

- Objectives
  - Increased competitiveness of transport and logistics in the eRegion by exploiting technologies
  - In-time responses to the EU calls for projects
  - Intensified collaboration of academia, business and ICT providers
- Topics to be discussed
  - Effect of globalization to transport and logistics
  - Effects of transport and logistics to environment and business
  - Transport and logistic and H2020
  - Opportunities .....

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# What is Logistics?

“The process of managing all activities required to strategically move raw materials, parts and finished goods from vendors, between enterprise facilities, and to customers”.



*Council of Logistics Management*

*Logistic → transportation (of goods)*

*Transportation → not only goods,  
also passengers*

*Both related to technology (ICT)*



# Globalisation

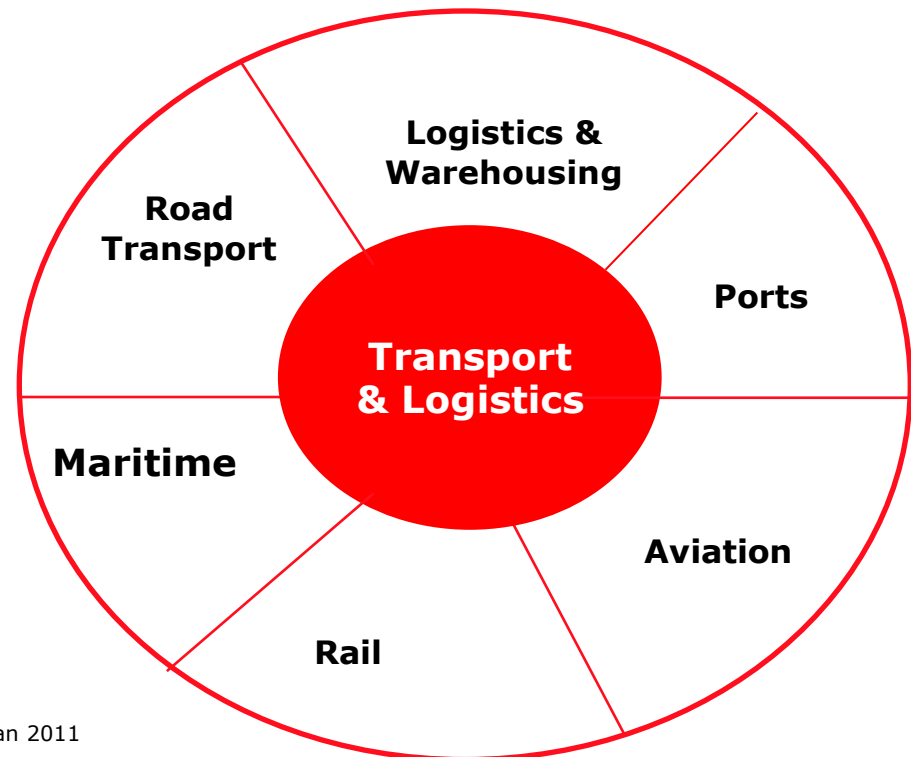
- Globalization
  - Development of technology
  - Increasing multinational investment
  - Growth of international financial markets
  - Increased dominance of intern. bodies
  - Expansion of international trade
  - Global production
  - Global labour market
- The needs of global corporations
  - Globalized production
  - Global supply chain
  - Liberalization of transport
  - Outsourcing logistics
- Transnational companies require transnational transport networks



# Transport & Logistics Industry

- The Transport and Logistics industry encompasses the organisations that carry out “the movement of goods and people from an origin to a destination.”

The Transport & Logistics Industry Skills Council breaks the industry down into 6 key sectors:

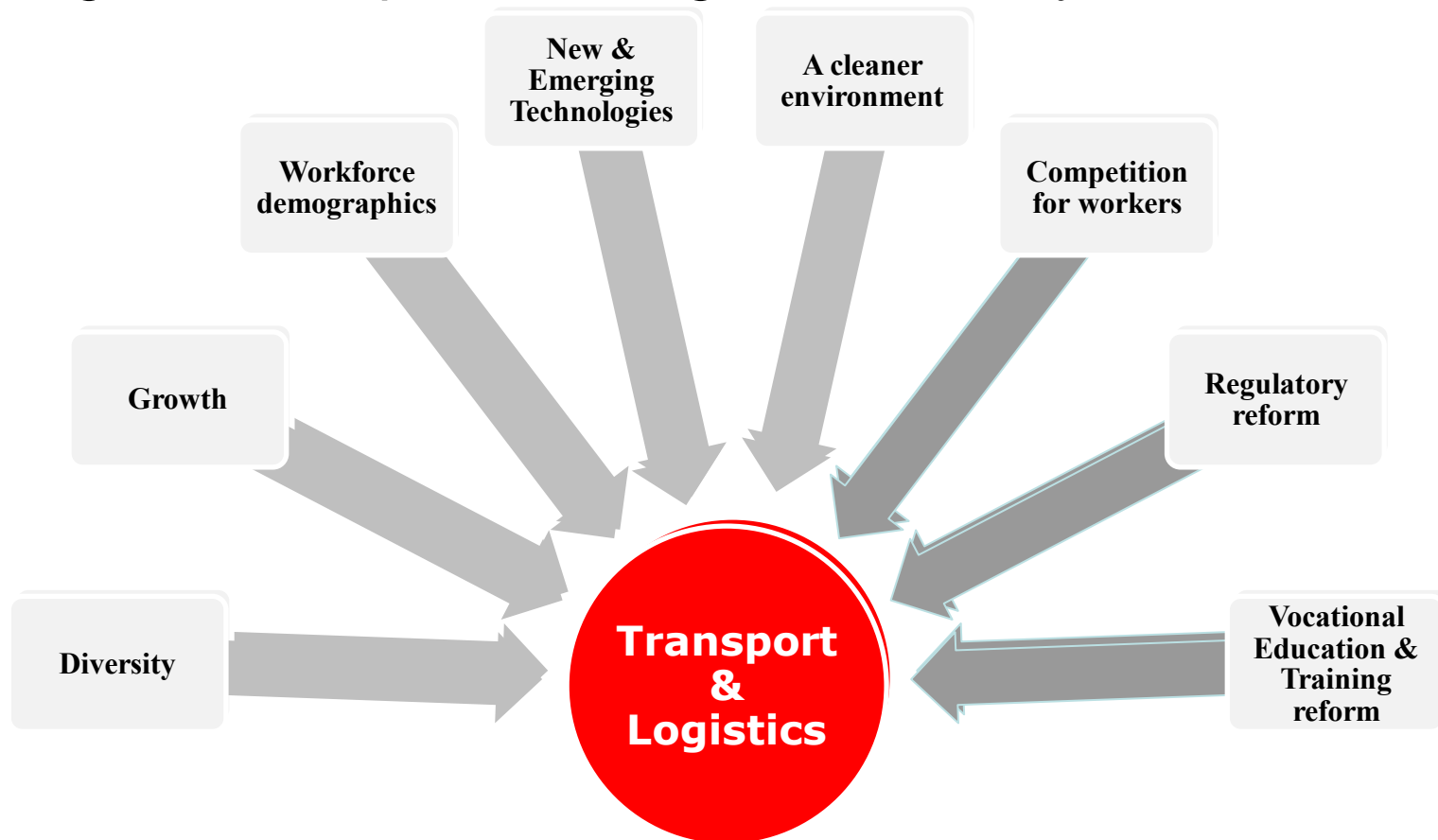


Source: Transport & Logistics Industry Skills Council, Environmental Scan 2011

# Workforce Development Challenges



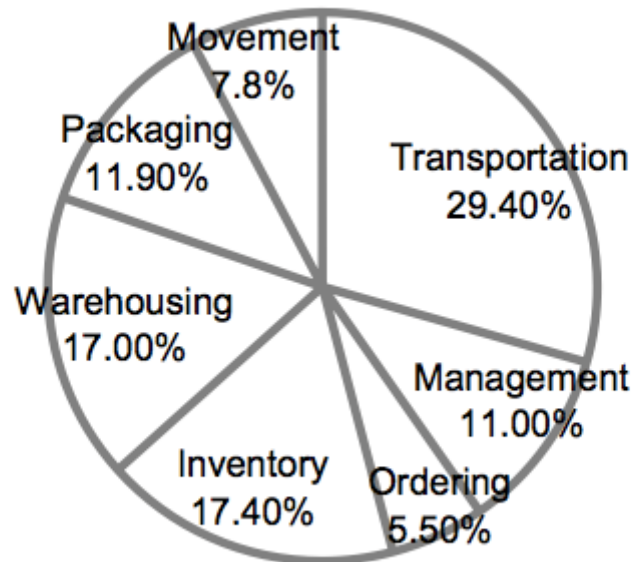
- There are several workforce development challenges facing the Transport and Logistics Industry.



# Effect of transportation in the supply chain



VIDEO LIVE DELEGATE PARTNERS SCL EVENT



FEBRUARY 7, 2014 · 10:18 AM

## The Role of Transportation in Supply Chain Management



By Mattia Testi, Business Analyst – [Eyefreight](#)

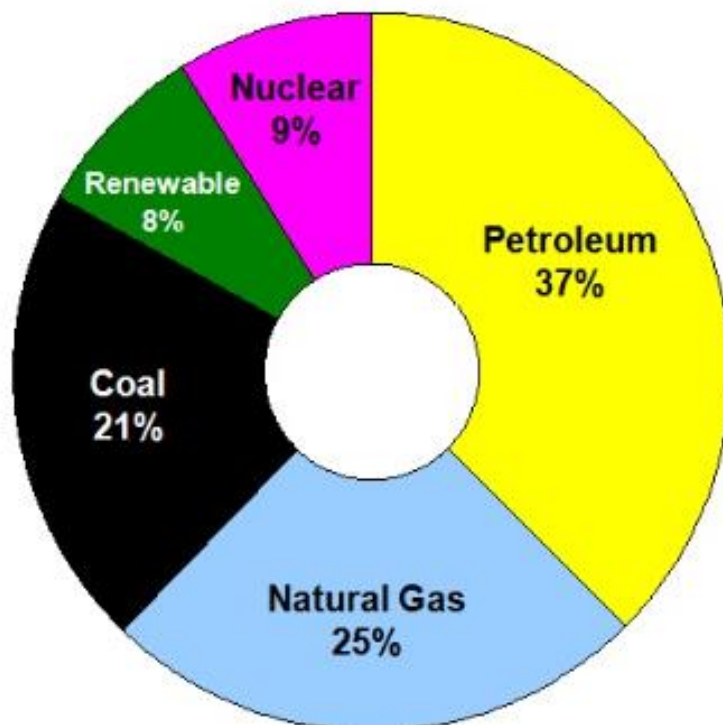
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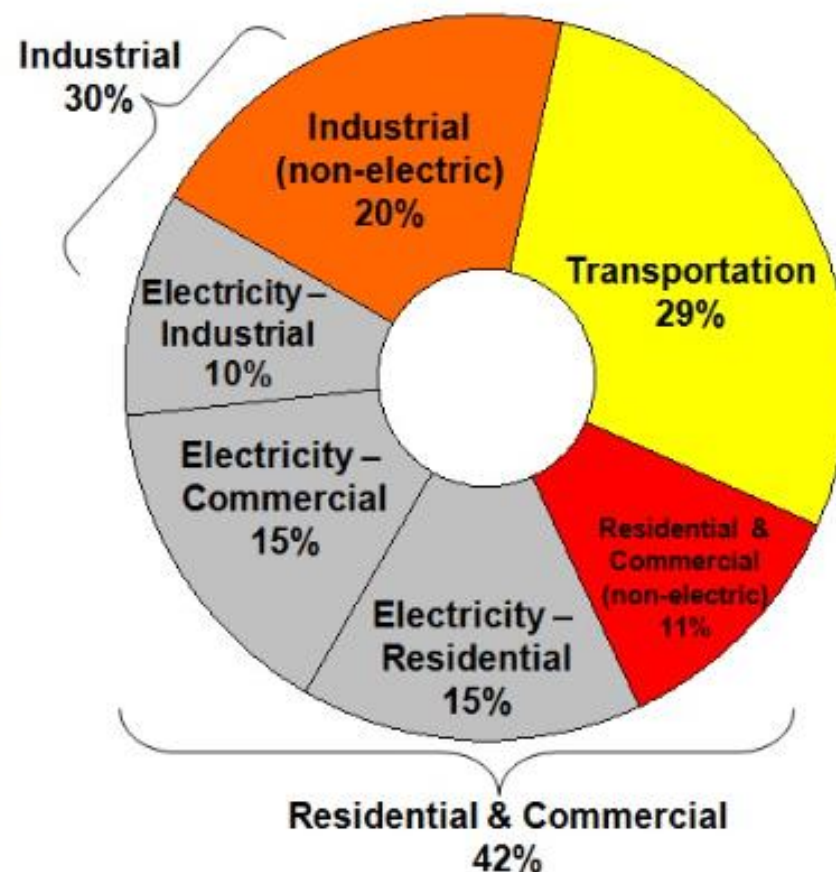


# Energy for transportation

## Energy supply



## Energy demand





# Energy for transportation



90% in 2040

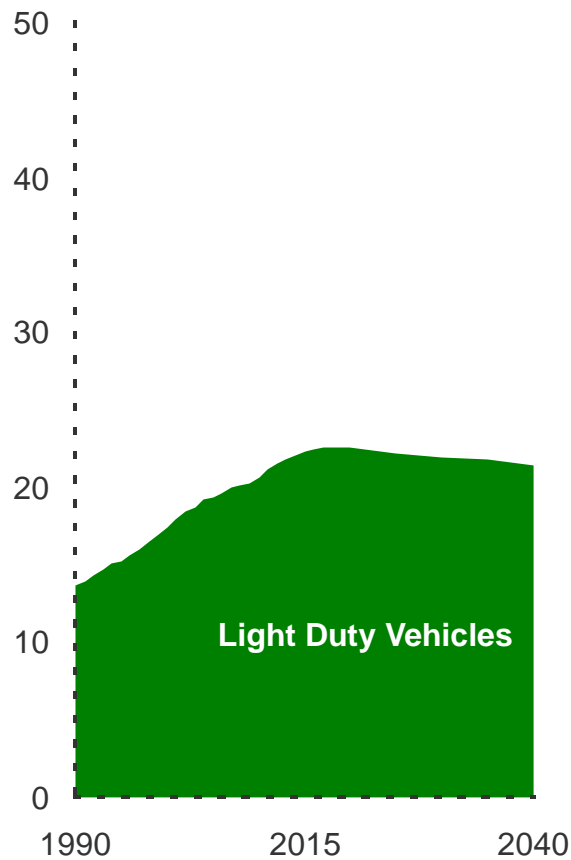
In 2040, 90% of transportation will be based on liquid fuels derived from oil versus 95% of today

# Global energy demand for transportation



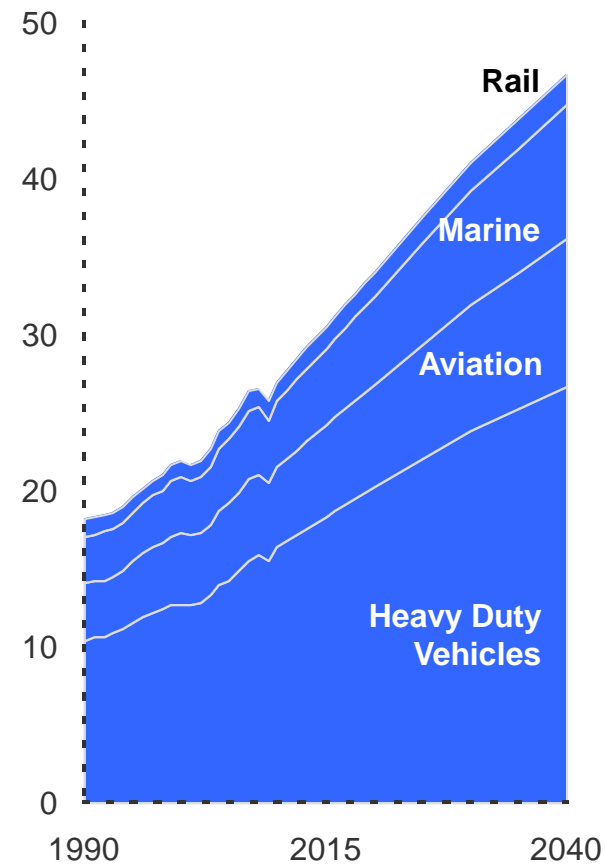
## Personal

Millions of oil-equivalent barrels per day



## Commercial

Millions of oil-equivalent barrels per day



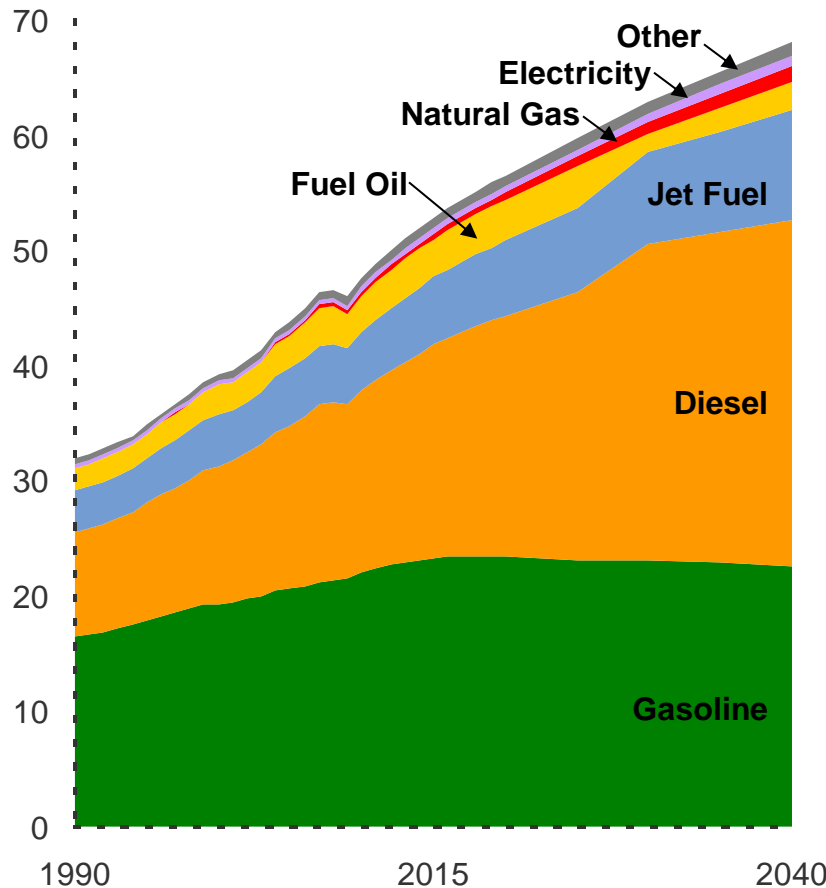
Source : The Outlook for energy: a view of 2040, Exxon

# Global energy demand for transportation



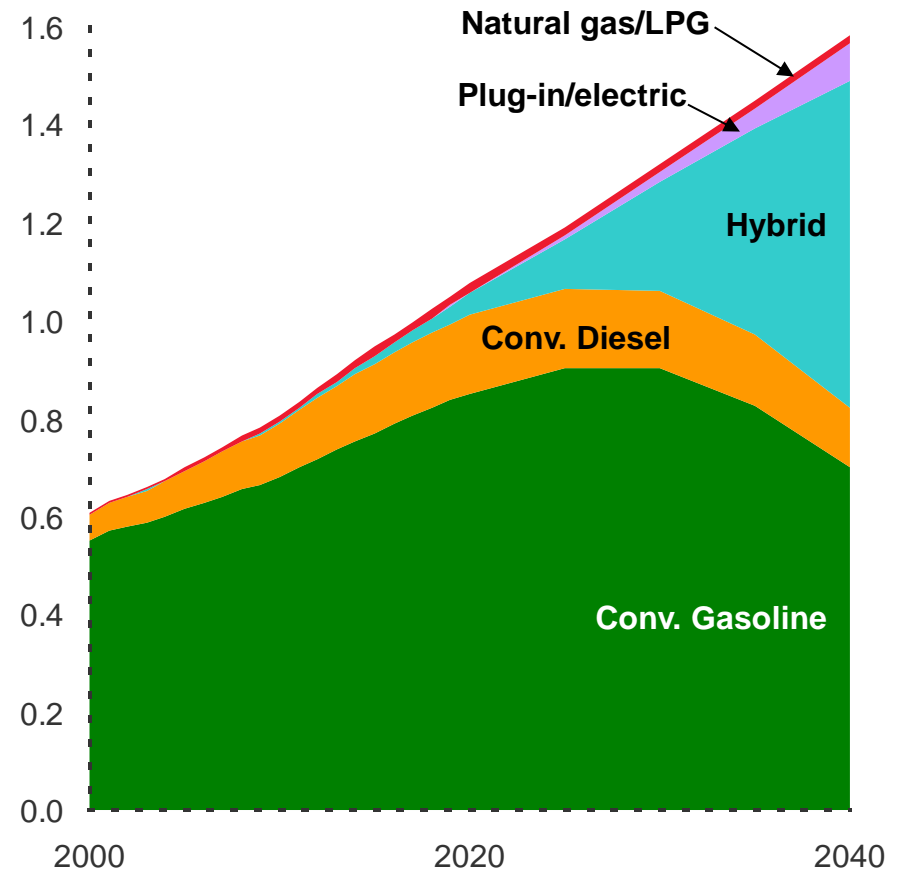
- Fuel

Millions of oil-equivalent barrels per day



## Type of vehicles

Billions of vehicles



Source: The Outlook for energy: a view of 2040, Exxon

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# Horizon2020 Structure



## Societal Challenges

- Health, demographic change and wellbeing
- Food security, sustainable agriculture and bio-economy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, efficiency and raw materials
- Inclusive, innovative and secure societies

## Industrial Leadership

leadership in enabling and industrial technologies

KET

facilitate **access to risk finance**

support for innovation in SMEs

ICT

Advanced materials

Biotechnologies

Advanced Manufacturing

Space

Nanotechnologies

support for cross-cutting actions combining several Key Enabling Technologies

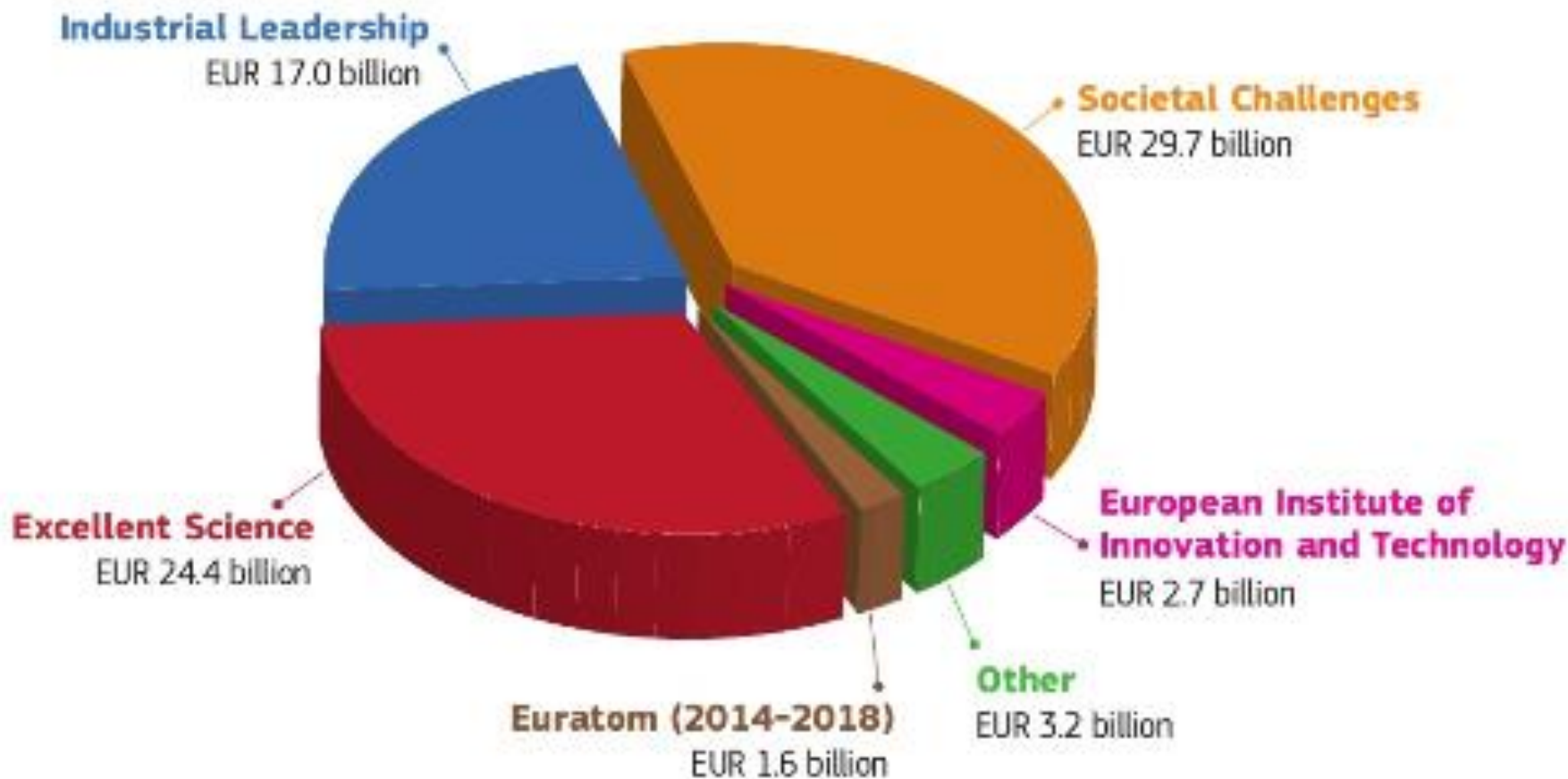
## Horizon 2020

### Excellence Science

- Marie Curie actions
- Support for Future and Emerging Technologies
- Research infrastructures (including e- infrastructures) accessible to all researchers in Europe
- Support the individuals and their teams to carry out frontier research by building on the success of the European Research Council



# Horizon 2020 budget (in current prices) - €79 Billion



# H2020 and transportation



- Societal Challenges funding (M€, 2014-20)

Health, demographic change and wellbeing	€8,029
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	€4,152
Secure, clean and efficient energy	€5,782
<b>Smart, green and integrated transport</b>	<b>€6,339</b>
Climate action, resource efficiency and raw materials	€3,160
Inclusive, innovative and secure societies	€3,819

# Transport – Horizon 2020



- Objective:
  - to achieve a European transport system that is resource efficient, climate and environmentally friendly, safe and seamless from the benefit of all citizens, the economy and society”
- 4 Activities:
  - Resource efficient transport that respects the environment.
  - Better mobility, less congestion, more safety and security.
  - Global leadership for the European transport industry
  - Socio-economic and behavioural research and forward looking activities for policy making
- 3 Calls for Proposals:
  1. Mobility for growth (Aviation, Rail, Road, Waterborne, Urban Mobility, Logistics, Intelligent Transport Systems, Infrastructure, Social-Economic Behavioural Research)
  2. Green vehicles
  3. Small business and fast track for Innovation

# Mobility for Growth : Smart, Green and Integrated Transport



- ROAD
  - MG.3.4-2014. Traffic safety analysis and integrated approach towards the safety of Vulnerable Road Users
  - MG.3.5-2014 Cooperative ITS for safe, congestion free and sustainable mobility
  - MG.3.6-2015. Safe and connected automation in road transport
- URBAN MOBILITY
  - MG.5.1-2014. Transforming the use of conventionally fuelled vehicles in urban areas
  - MG.5.2-2014. Reducing impacts and costs of freight and service trips in urban areas
  - MG.5.3-2014. Tackling urban road congestion
  - **MG.5.4-2015. Strengthening the knowledge and capacities of local authorities**
  - **MG.5.5-2015. Demonstrating and testing innovative solutions for cleaner and better urban transport and mobility**
- LOGISTICS
  - MG.6.1-2014. Fostering synergies alongside the supply chain (including e-commerce)
  - MG.6.2-2014. De-stressing the supply chain
  - **MG.6.3-2015. Common communication and navigation platforms for pan-European logistics applications**

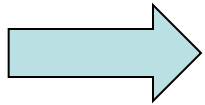
# Mobility for Growth : Smart, Green and Integrated Transport



- RAIL
  - MG.2.1-2014. I<sup>2</sup>I – Intelligent Infrastructure
  - MG.2.2-2014. Smart rail services
  - MG.2.3-2014. New generation of rail vehicles
- INTELLIGENT TRANSPORT SYSTEMS
  - MG.7.1-2014. Connectivity and information sharing for intelligent mobility
  - MG.7.2-2014. Towards seamless mobility addressing fragmentation in ITS deployment in Europe
- INFRASTRUCTURE
  - MG.8.1-2014. Smarter design, construction and maintenance
  - MG.8.2-2014. Next generation transport infrastructure: resource efficient, smarter and safer
  - **MG 8.3-2015 Facilitating market take up of innovative transport infrastructure solutions**
  - **MG.8.4-2015. Smart governance, network resilience and streamlined delivery of infrastructure innovation**
- SOCIO-ECONOMIC AND BEHAVIOURAL RESEARCH AND FORWARD LOOKING ACTIVITIES FOR POLICY MAKING
  - **MG.9.1-2015. Transport Societal Drivers**
  - **MG.9.2-2015. User behaviour and mobility patterns in the context of societal trends**
  - **MG.9.3-2015. Analysis of Funding Schemes for transport infrastructure**
  - **MG.9.4-2015. Research ,technology, development and market prospects for the European transport industries**

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# Opportunities at global level

- Care for environmental impact
  - Sensibility of population to environmental themes
  - Need to reduce impact to environment – de-carbonization
  - Focus on the Hydrogen Age
- Peculiarity of the area
  - North Adriatic and 3 EU macro regions
  - Collaboration established in the area
  - Structural funds and RIS3
- Actual situation
  - Reorganization of ports and dry-ports
  - Need of investments in rail
  - Availability of ICT competences in the region

# The italian situation

- National level
  - PNR : national research plan: transportation is one of the priority sector
  - Strategies of Italian Ministry of research aligned to the H2020 strategies
- Regional level
  - Smart specialization strategy includes smart transportation
  - Support to cross border collaborations from regional government
  - Strong collaboration among regional universities
- Local
  - UNITS internationalization strategy
  - Availability of KET at University level
  - Strategy for old port of Trieste under development
  - GECT European group of cross border collaboration active

# Have we an alternative?



Type:  
Horse Front Drive

Specifications:  
bio-propulsion  
displacement: 15 ccm  
fuel economy: 0 l  
horsepower: 1 hp  
 $V_{max}$ : 20 mph  
cruising range: 20 miles

Options:  
navigation system  
full air conditioning

Emissions:  
 $CO_2$  = 380 g/mile  
 $CH_4$  = 1,6 g/mile  
particles = 800 g/mile  
low-emission

**“The Stone Age didn’t end because we ran out of stone ....**

**The Oil Age won’t end because we run out of oil! “**



**Don Huberts**

