The future of energy in transport - European and Italian scenarios

Martino dal Verme Energy Monitoring, Studies and Statistics

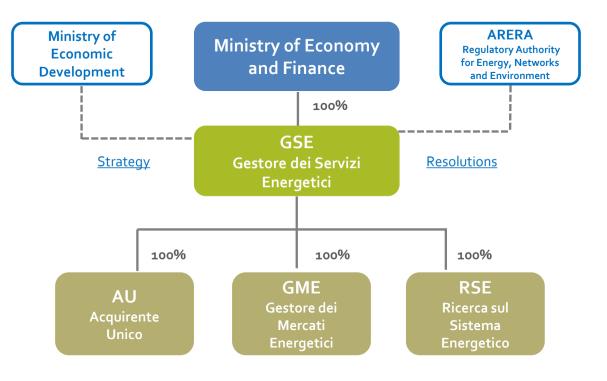
ERESS FORUM

Rome, 13th June 2018



GSE

The corporate structure



Main activities

INCENTIVES
AND PROMOTION OF
ELECTRICITY FROM
RENEWABLE SOURCES

- Qualifying RES plants
- Granting incentives, purchase & resale energy, certification
- On site verification of plants
- Satellite-assisted metering (forecast of energy production)

ENERGY EFFICIENCY, RENEWABLE ENERGY FOR HEATING & COOLING AND TRASPORT

- White Certificates
- High-efficiency CHP
- Heating & Cooling support scheme
- Biofuel
- On site verification of plants

INSTITUTIONAL ACTIVITIES AND OTHER TECHNICAL ENERGY SERVICES

- Support to the institutional policy makers and Public Administrations
- Monitoring, Studies and Statistics
- International activities (IEA, IRENA, European projects, etc.)
- ETS auctions to sale the Italian CO2 allowances
- Promotion and communication

Mission

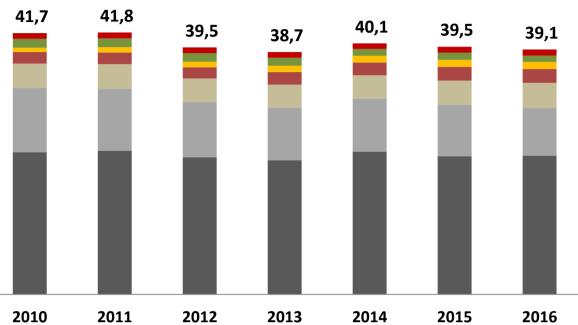
"to foster sustainable development by providing support for renewable energy and energy efficiency and by taking actions to build awareness of environmentally-efficient energy uses."



Renewables in transport – National statistics

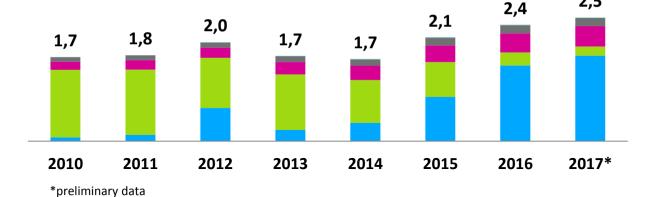
Energy consumptions in transport (Mtoe)



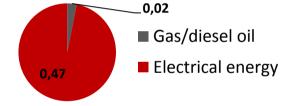


Renewables consumptions in transport according to Renewable Energy Directive accounting rules (Mtoe)

- Ren. Elec. in road transport
- Ren. Elec. in rail transport
- Double counting Biofuels
- Ren. Elec. in all other transport modes
- Single counting Biofuels

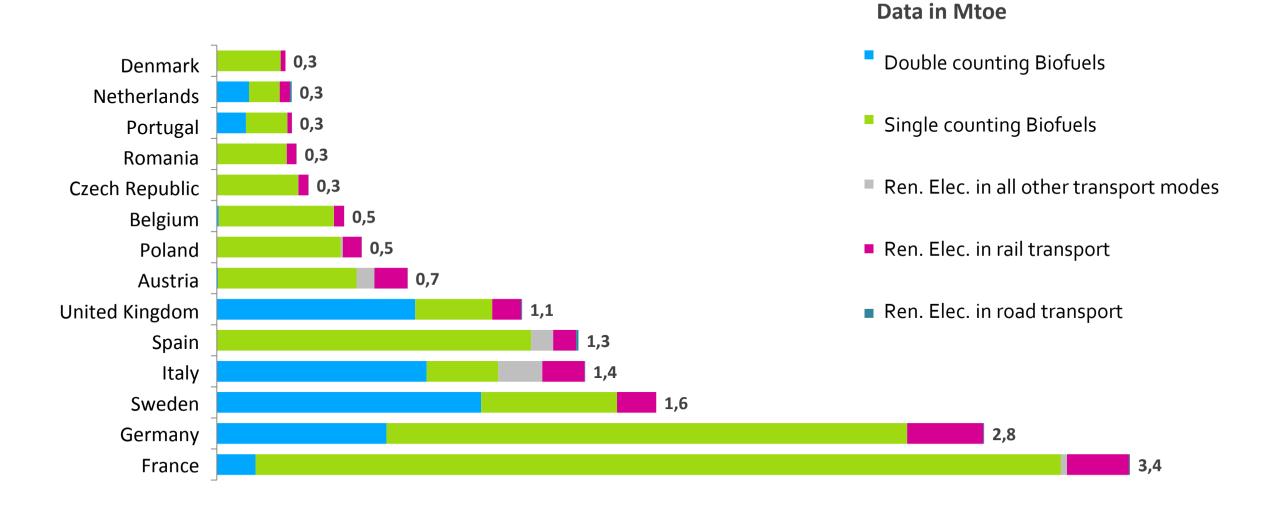


Energy consumptions in rail transport in 2016 (Mtoe)





Renewables in Transport Sector in Europe



2030 European targets currently under negotiation

RENEWABLES

Renewable share of gross final energy consumptions (**UE Target**)

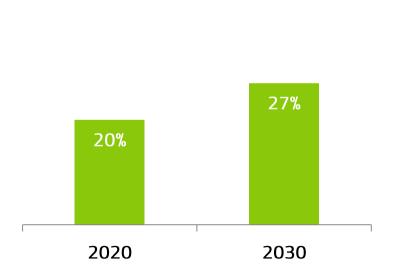
EFFICIENCY

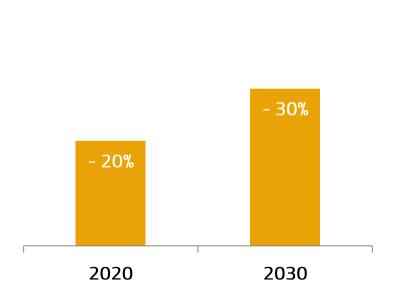
Primary energy consumption redutions compared to reference scenario

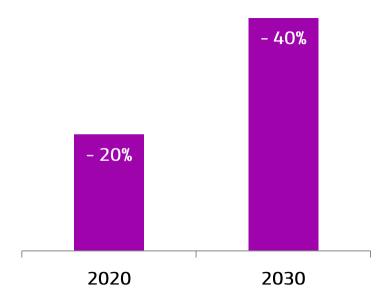
(UE target)

EMISSIONS

Greenhouse gas emission reduction compared to 1990 (**UE target**)



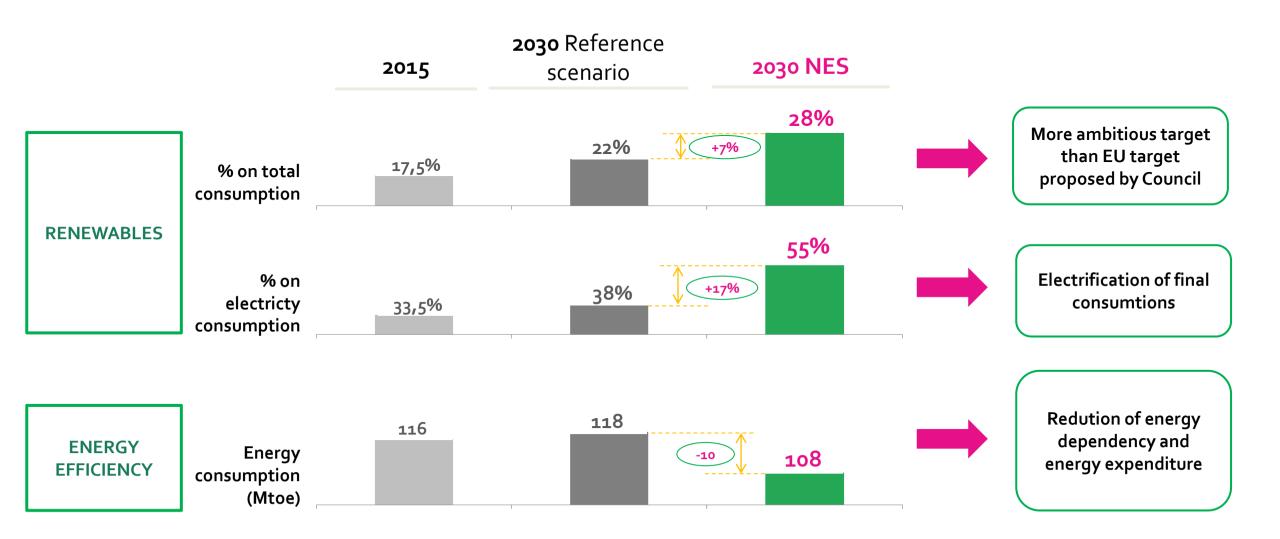




European parliament proposed to increase 2030 target set by EU Council draft, up to 35 % of RES share and -35% efficiency target.

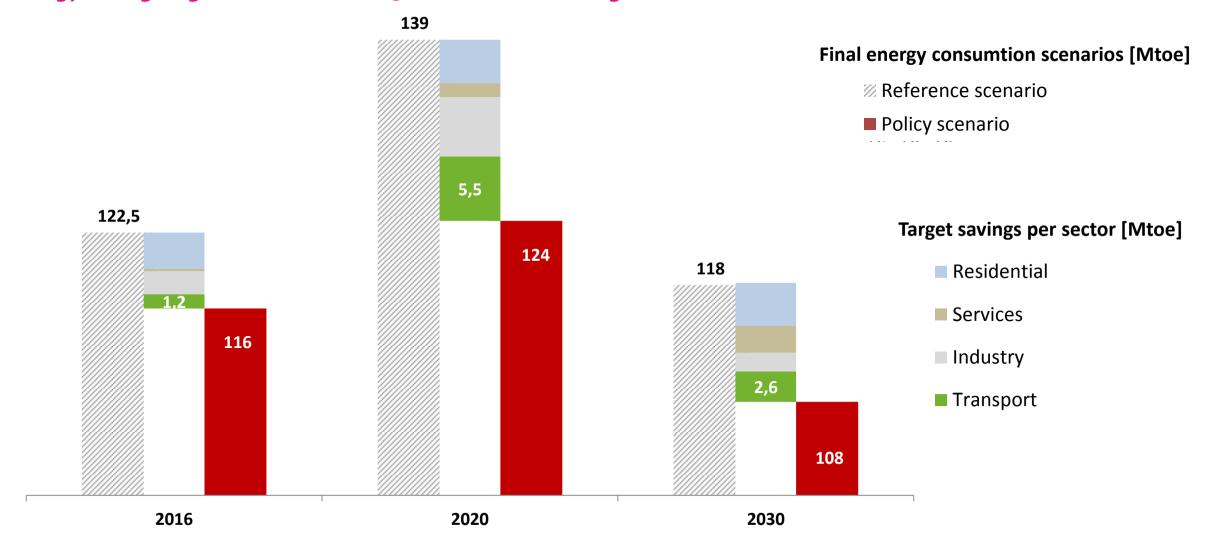


Renewables and energy efficiency in National Energy Strategy (NES - 2017)



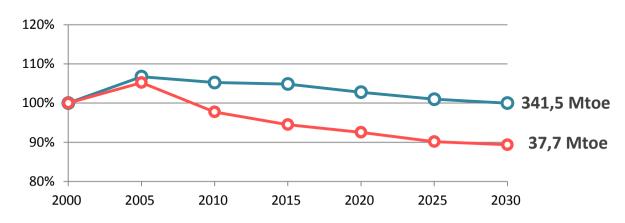
Energy efficiency national targets

Energy saving targets for 2020 and 2030: breakdown among sectors [Mtoe]

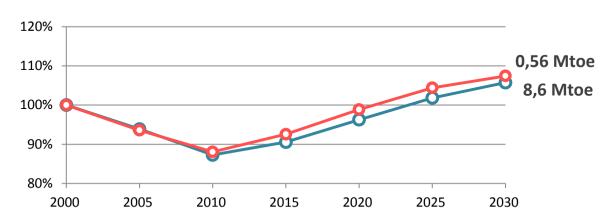


Transport energy demand scenario (PRIMES model) [2000=100]

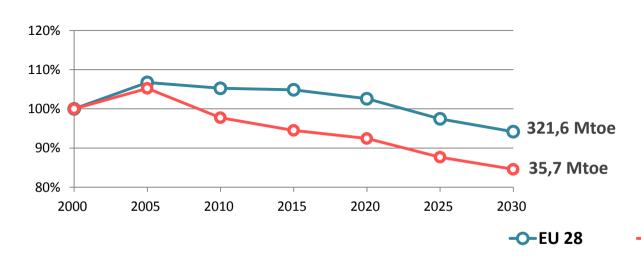
<u>Transport sector – Reference scenario</u>



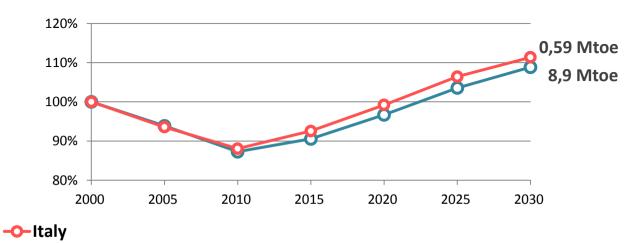
Rail transport – Reference scenario



<u>Transport sector – EUCO3030 scenario</u>



Rail transport - EUCO3030 scenario





Past and future of energy policies on renewables

RES share of Gross final consumption of energy: statistics, and targets for year 2020 and 2030 (National Energy Strategy)

