



Directorate-General
for Energy



● European Energy Policy

European Security and European Gas Supply Options

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● Challenges for energy security in the EU

- **Climate change concerns:** EU climate and energy objectives 20-20-20 by 2020
- **Back-up of renewable electricity production:** gas to gain importance, flexibility, „intelligent“ networks
- **Investment needs:** € 1 trillion (€ 200m transmission) by 2020
- **Insecurity of energy supply:** Declining EU indigenous production increases imports of oil/gas, transit risks
- **Safety concerns:** offshore oil/gas exploration, nuclear safety
- **Price volatility and economic uncertainty**

● Energy 2020 - A strategy for competitive, sustainable and secure energy (10 Nov 2010)

Priority 1: Achieving an energy-efficient Europe

Priority 2: Building a pan-European energy market with an integrated energy network

Priority 3: Leadership in developing new energy technologies

Priority 4: Providing secure, safe and affordable energy

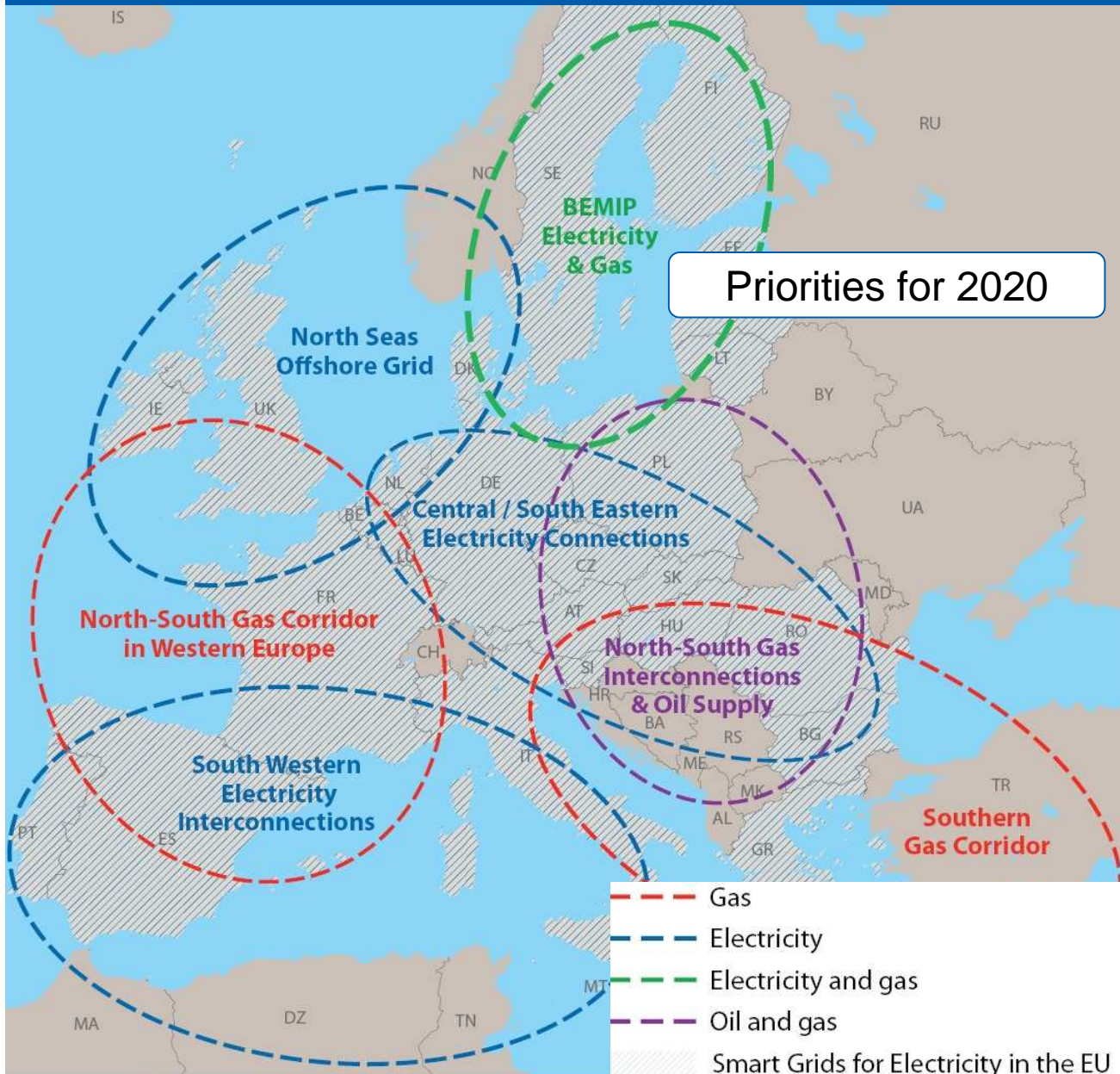
Priority 5: Strengthening the external dimension of the EU energy market

● Implementation of the internal energy market

- Second/Third Internal Energy Market Packages - **Rules for an open, integrated and competitive gas market in the EU**
- Separation of transport and supply/production
- Transparency
- Introducing entry-exit system
- No separate “transit” regime
- **Market integration** through framework guidelines and network codes
 - » Agency for the Cooperation of Energy Regulators (ACER)
 - » ENTSO-G/E
- Community-wide **10-Year-Network Development Plans** as starting point for joint and consistent investment planning



Priorities for 2020 and beyond



Priorities for 2020

Priorities beyond 2020

Electricity Highways

CO2 transport network

Energy infrastructure policy

Prioritisation

European priority corridors and areas

Objective selection criteria

Regional approach

Identification of projects of European Interest

Implementation

More efficient and transparent authorisation process, build public acceptance

Better leverage of private resources through appropriate tariff regulation and public funding

● **Priority 3: Leadership in developing new energy technologies**

- **Implementing the European Strategic Energy Technology Plan (SET-Plan)**

- *Concentrate Community funding on the 6 industrial initiatives*

- **Launching four new, targeted, large scale European projects**

- *Smart grids; electric storage; second generation biofuels; smart cities*

- **Ensuring long-term EU technological competitiveness**

- *Maintain EU leadership in ITER*



- **Priority 4: Providing secure, safe and affordable energy**

- **Making energy policy more consumer-friendly**

- *Regular benchmark reports with a particular focus on vulnerable consumers; London Forum*

- **Continuous improvement in safety and security**

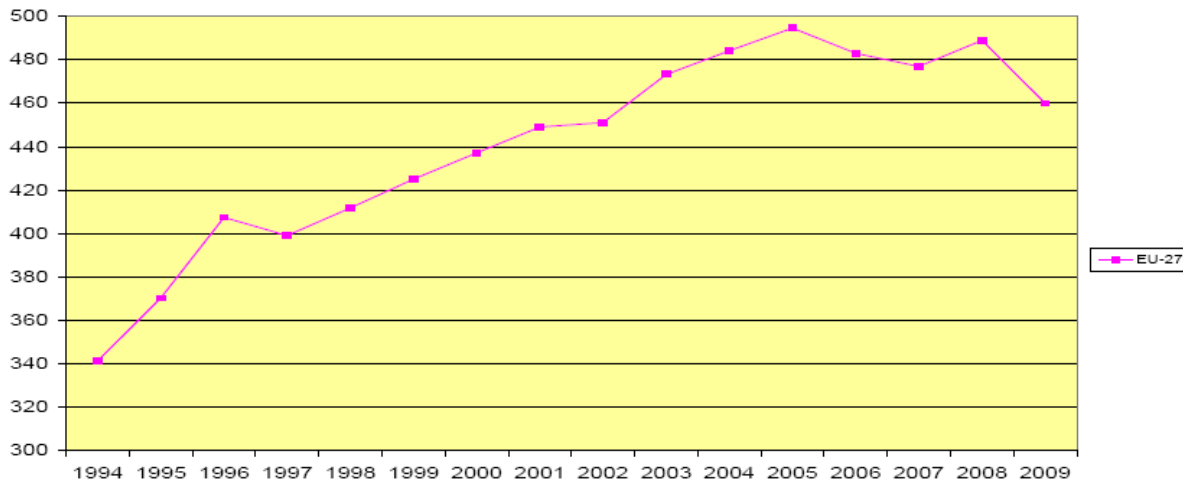
- *Strengthen the safety framework for offshore oil and gas extraction; enhance the safety and security framework for nuclear energy*

● **Priority 5: Strengthening the external dimension of the EU energy market**

- **Integrating energy markets with EU neighbours**
 - *Energy Community Treaty; Eastern Partnership, European neighbourhood policy*
- **Establishing key energy partnerships**
 - *Energy framework agreements with key supplier and transit countries and dialogue with consumer countries*
- **Promoting a low-carbon energy economy at global level**
 - *Prominent role for sustainable energy and energy efficiency in bilateral and global cooperation*
- **Promoting legally-binding nuclear safety, security and non-proliferation standards worldwide**
 - *International initiative on nuclear safety, security and non-proliferation standards*

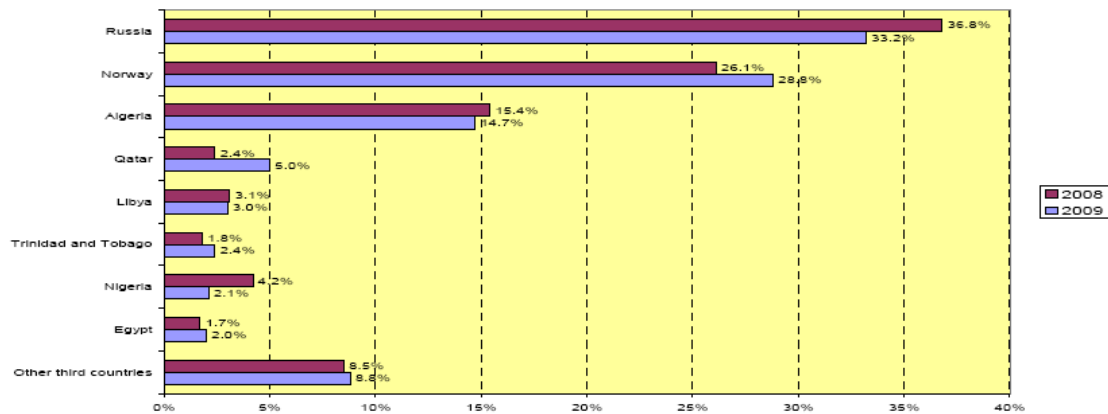
Role of gas in the EU energy mix

Figure 1: Gross inland consumption in EU-27 in million toe (gross calorific value)



Source: Eurostat ([nrg_103m](#), [nrg_124m](#), [nrg_134m](#))

Figure 2: EU-27 imports of natural gas: % of extra-EU imports by country of origin



Source: Eurostat ([nrg_124m](#))

● Regulation EU No 994/2010 on Security of Gas Supply

Risk assessment

Preventive Action Plans

Emergency Plans

Consultation between
competent authorities
and Commission
(ENTSOG, NRAs,
ACER)

Published and notified to the Commission

Assessment by the Commission:

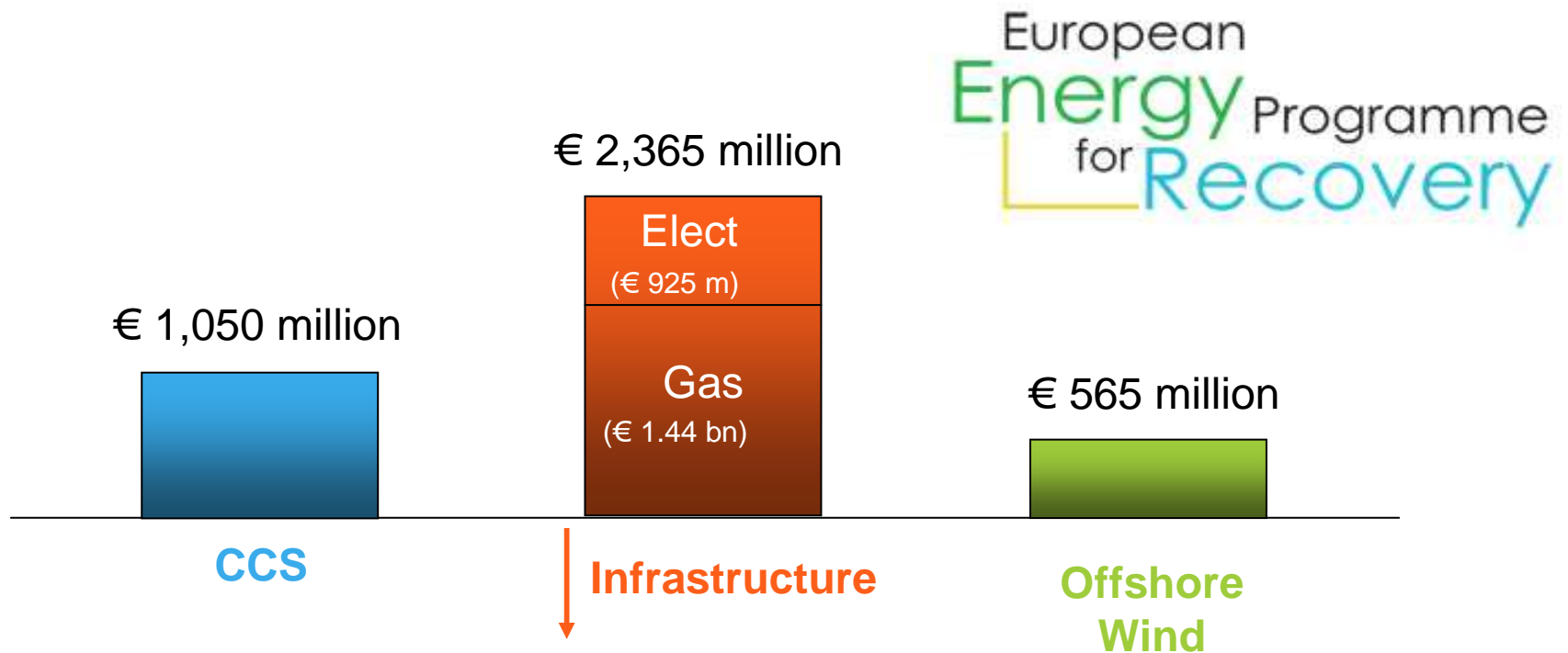
- Compliance with EU law
- Solidarity
- Mitigation of risks

Commission can require changes to the Plans

● Regulation EU No 994/2010 on Security of Gas Supply

- **Transparency rules** (gas contracts, IGAs, crisis information)
- **Three-level approach:** market, national/regional and EU level with Union/ regional emergency
- Common EU concept of **protected customers**
- **Binding infrastructure standard N-1 (4 years)**
- **Obligation of reverse flows for TSOs (3 years)**
on all cross-border interconnections between Member States (except LNG, production, distribution)
- **Minimum supply standard** of at least 30 days in severe conditions

European Energy Programme for Recovery



European Energy Programme for Recovery

44 projects with commitments of total of 2.268 M€

- Gas interconnectors: 1.285 M€
- Reverse flow: 78 M€
- Electricity interconnectors: 905 M€

● Concluding remarks

- Global interdependency: EU is the major regional **trading block, gas importer and geopolitical partner**
- Ensuring the highest international **standards on safety and security**
- **Integration of energy markets and networks with EU neighbours:** Energy Community, Eastern Partnership, Dialogue with energy suppliers/transit countries
- **New sources and routes and competition in the EU gas market** - Southern Corridor and Mediterranean -Taping into gas reserves of Middle East, Central Asia and the Caspian region and North Africa
- **International partnerships** on energy efficiency, climate change and low-carbon technologies

● Thank you! Further information!

http://ec.europa.eu/energy/index_en.htm

