

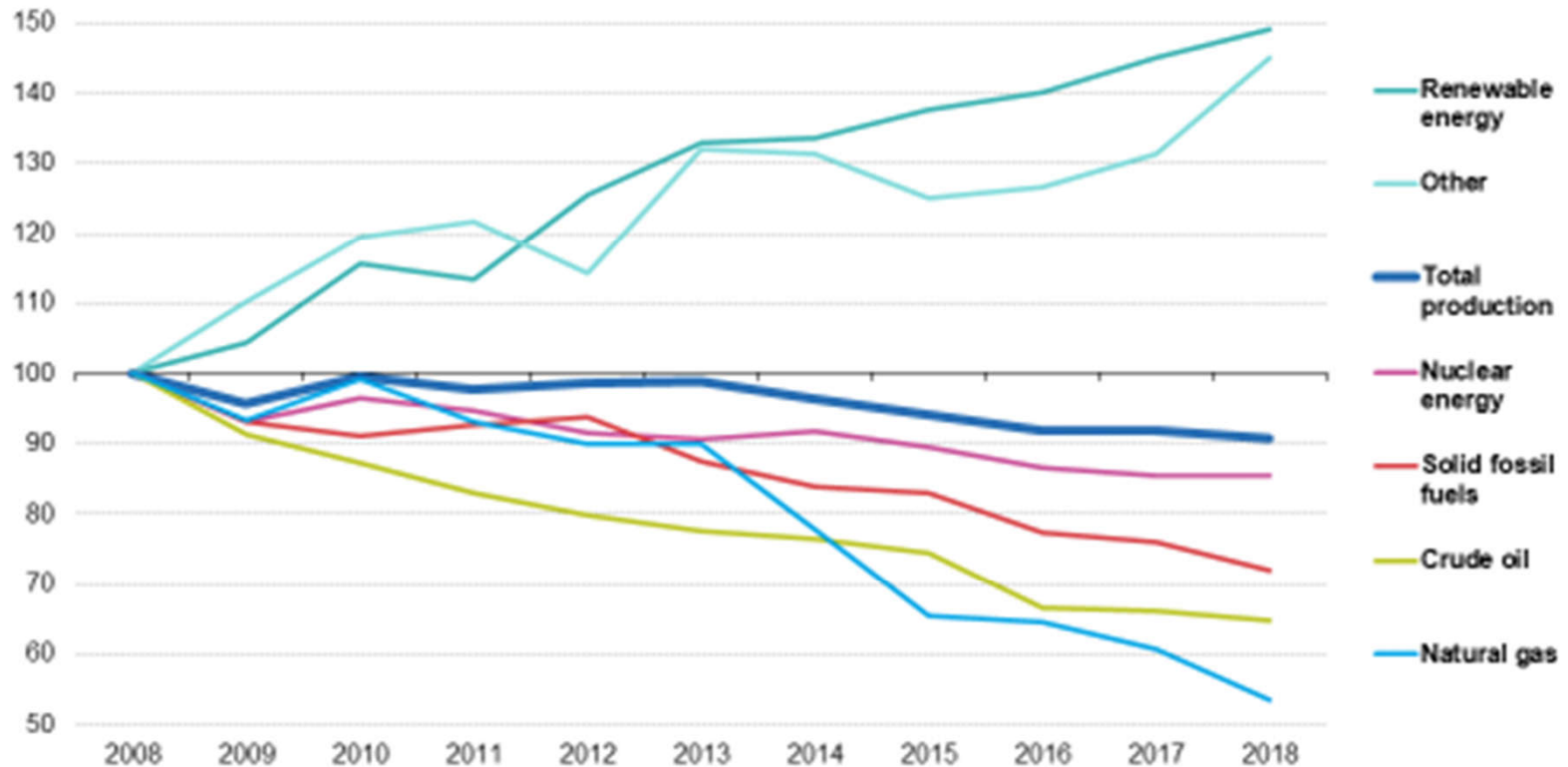
# External Dimension of the EU Energy Policy (ED EEP)

Veronika Zapletalová  
zapletalova@mail.muni.cz

# Production of primary energy by fuel type (EU27)

**Production of primary energy by fuel type, EU-27, 2008-2018**

(2008 = 100, based on tonnes of oil equivalent)



Source: Eurostat (online data code: nrg\_bal\_c)

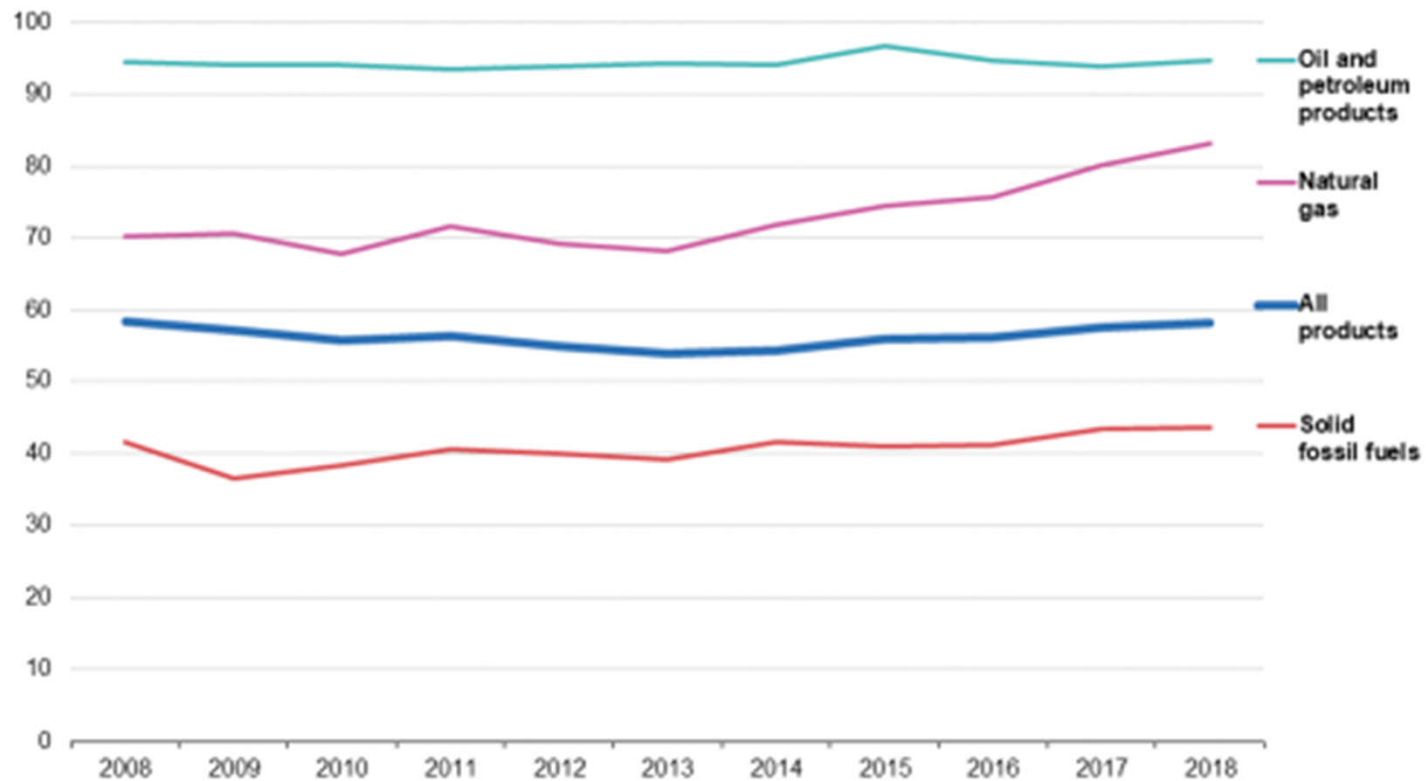
# EU28 import dependence

External dimension should

- Secure stable and reliable supplies of energy at affordable prices;
- Improve relationship between consuming countries, producers and transit countries;
- Strengthen the negotiating position of the EU by 'speaking with one voice' ;

Energy dependency rate, EU-27, 2008-2018

(% of net imports in gross available energy, based on tonnes of oil equivalent)



Source: Eurostat (online data code: nrg\_ind\_id)

Net imports of energy, in selected years, 2008-2018

	2008	2010	2012	2014	2016	2018	2008	2010	2012	2014	2016	2018
	(million tonnes of oil equivalent)						(tonnes of oil equivalent per inhabitant)					
<b>EU-27</b>	959.9	895.4	844.2	798.5	842.9	885.8	2.2	2.0	1.9	1.8	1.9	2.0
Belgium	55.7	53.6	46.1	47.1	47.8	52.9	5.2	4.9	4.2	4.2	4.2	4.6
Bulgaria	10.5	7.2	6.8	6.3	7.1	6.9	1.4	1.0	0.9	0.9	1.0	1.0
Czechia	12.7	11.5	11.0	12.7	13.7	16.0	1.2	1.1	1.0	1.2	1.3	1.5
Denmark	-4.4	-3.4	-0.5	2.2	2.7	4.5	-0.8	-0.6	-0.1	0.4	0.5	0.8
Germany	210.7	204.6	199.7	197.0	205.8	201.0	2.6	2.5	2.5	2.4	2.5	2.4
Estonia	1.6	0.9	1.2	0.7	0.5	0.0	1.2	0.7	0.9	0.5	0.4	0.0
Ireland	14.4	13.2	11.8	11.7	10.4	10.1	3.2	2.9	2.6	2.5	2.2	2.1
Greece	25.2	21.3	19.4	16.9	18.5	18.4	2.3	1.9	1.8	1.5	1.7	1.7
Spain	122.8	106.7	100.1	91.5	94.0	100.8	2.7	2.3	2.1	2.0	2.0	2.2
France	139.3	132.3	128.7	119.0	121.7	119.5	2.2	2.0	2.0	1.8	1.8	1.8
Croatia	5.4	4.4	4.4	3.6	4.2	4.6	1.3	1.0	1.0	0.8	1.0	1.1
Italy	155.3	148.5	132.0	115.0	121.5	121.9	2.6	2.5	2.2	1.9	2.0	2.0
Cyprus	3.1	3.0	2.6	2.3	2.6	2.7	4.0	3.6	3.1	2.7	3.1	3.1
Latvia	2.9	2.2	2.7	1.9	2.2	2.1	1.3	1.0	1.3	1.0	1.1	1.1
Lithuania	5.4	5.7	5.8	5.3	5.6	5.9	1.7	1.8	1.9	1.8	1.9	2.1
Luxembourg	4.5	4.5	4.3	4.1	4.0	4.3	9.3	9.0	8.3	7.4	7.0	7.1
Hungary	17.0	15.1	12.4	14.3	14.3	15.5	1.7	1.5	1.3	1.4	1.5	1.6
Malta	1.9	2.4	2.2	2.1	2.5	3.0	4.6	5.7	5.2	4.8	5.5	6.3
Netherlands	33.1	28.3	28.9	27.2	41.2	53.2	2.0	1.7	1.7	1.6	2.4	3.1
Austria	23.7	21.9	21.5	21.6	21.1	21.8	2.8	2.6	2.6	2.5	2.4	2.5
Poland	30.4	32.1	31.0	27.9	31.0	48.0	0.8	0.8	0.8	0.7	0.8	1.3
Portugal	21.8	18.7	18.2	16.4	17.5	18.8	2.1	1.8	1.7	1.6	1.7	1.8
Romania	11.0	7.5	7.9	5.3	7.0	8.2	0.5	0.4	0.4	0.3	0.4	0.4
Slovenia	4.3	3.6	3.6	3.0	3.3	3.6	2.2	1.8	1.8	1.4	1.6	1.8
Slovakia	12.0	11.4	10.2	9.8	9.9	10.9	2.2	2.1	1.9	1.8	1.8	2.0
Finland	19.8	18.1	16.2	17.2	15.8	15.8	3.7	3.4	3.0	3.2	2.9	2.9
Sweden	19.8	19.9	15.8	16.5	17.0	15.4	2.2	2.1	1.7	1.7	1.7	1.5
United Kingdom	58.7	62.6	88.8	89.0	67.8	66.5	1.0	1.0	1.4	1.4	1.0	1.0
Iceland	1.2	0.8	0.8	0.8	1.1	1.3	3.9	2.4	2.5	2.6	3.2	3.7
Norway	-187.7	-175.1	-175.7	-166.9	-179.4	-175.8	-39.6	-36.1	-35.2	-32.7	-34.4	-33.2
Montenegro	0.6	0.3	0.4	0.3	0.3	0.3	0.9	0.5	0.6	0.5	0.6	0.5
North Macedonia	1.4	1.3	1.4	1.4	1.6	1.5	0.7	0.6	0.7	0.7	0.8	0.7
Albania	1.1	0.6	0.3	0.7	0.5	0.5	0.4	0.2	0.1	0.2	0.2	0.2
Serbia	6.4	5.2	4.1	3.7	4.6	5.4	0.9	0.7	0.6	0.5	0.6	0.8
Turkey	72.5	74.7	89.3	94.1	106.1	110.0	1.0	1.0	1.2	1.2	1.3	1.4
Bosnia and Herzegovina	:	:	:	1.7	2.1	1.8	:	:	:	:	:	:
Kosovo*	0.6	0.6	0.6	0.6	0.6	0.8	0.3	0.3	:	:	0.4	0.4
Moldova	0.1	2.0	1.9	1.9	2.0	2.2	0.0	0.6	0.5	0.5	:	:
Ukraine	57.3	41.9	38.5	27.4	27.7	32.3	1.2	0.9	0.8	0.6	0.6	0.8
Georgia	:	:	:	3.2	3.5	3.8	:	:	:	0.7	1.0	1.0

\* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Source: Eurostat (online data codes: nrg\_bal\_s and demo\_pjan)

## Main origin of primary energy imports, EU-27, 2008-2018

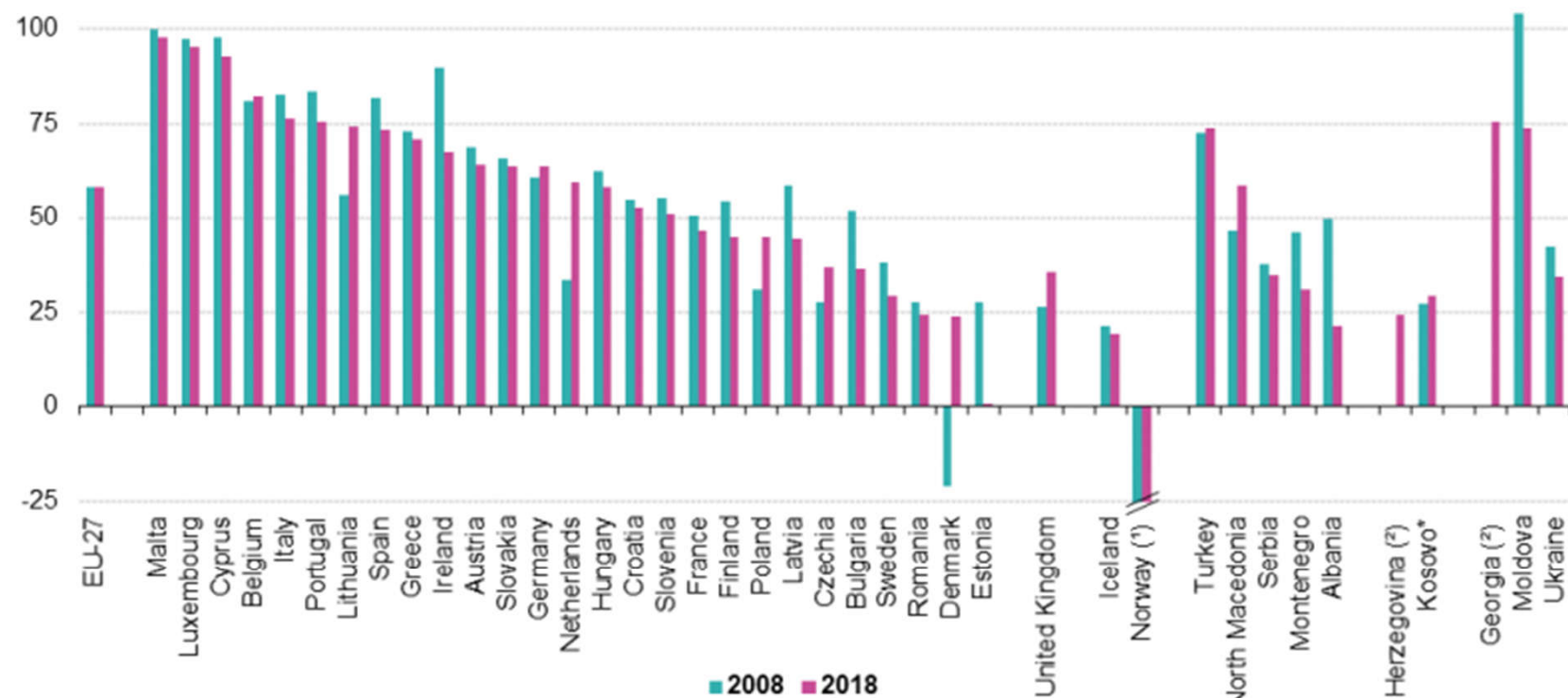
(% of extra EU-27 imports)

	Hard coal (based on tonnes)											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Russia	19.9	25.8	25.5	24.2	22.1	26.6	27.7	28.5	30.8	38.1	42.4	
United States	15.9	14.7	17.5	18.3	22.5	20.6	18.7	13.5	13.0	16.0	18.6	
Colombia	11.7	17.0	17.7	20.5	20.9	18.2	18.8	21.1	20.4	17.2	13.4	
Australia	13.3	7.9	10.9	9.1	8.7	9.8	8.3	12.1	16.7	11.8	11.8	
Indonesia	7.8	8.0	6.3	6.1	5.9	4.4	4.7	4.6	3.5	3.5	3.8	
South Africa	18.5	17.5	10.9	9.5	8.1	7.8	10.0	8.3	5.5	5.1	2.8	
Canada	2.7	1.8	2.2	2.6	2.1	2.3	3.5	1.8	2.5	2.6	2.6	
Mozambique	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.5	0.7	1.3	1.8	
Kazakhstan	0.4	0.2	0.2	0.4	0.4	0.4	0.7	0.6	0.6	0.7	1.0	
Others	9.8	7.2	8.7	9.3	9.4	9.8	7.2	8.9	6.3	3.7	2.0	
	Crude oil (based on tonnes)											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Russia	32.1	34.2	35.2	35.6	34.3	35.0	31.7	30.0	32.7	31.0	29.8	
Iraq	3.4	3.9	3.4	3.7	4.3	3.9	4.8	7.9	8.6	8.5	8.7	
Saudi Arabia	7.1	5.9	6.1	8.4	9.2	8.8	9.0	8.0	7.8	6.6	7.4	
Norway	9.6	9.6	7.8	7.3	6.9	8.2	9.3	8.4	8.0	7.8	7.2	
Kazakhstan	5.0	5.5	5.7	6.0	5.4	6.1	6.7	6.8	7.0	7.7	7.2	
Nigeria	3.7	4.2	3.9	5.7	7.3	7.3	8.4	7.8	5.2	5.8	7.1	
Libya	9.9	9.0	9.9	2.8	8.0	5.5	3.4	2.5	2.2	4.9	6.1	
Azerbaijan	3.3	4.2	4.5	5.1	4.0	5.0	4.7	5.4	4.7	4.7	4.6	
Iran	5.5	4.8	5.9	6.1	1.3	0.0	0.1	0.0	3.0	5.5	3.9	
United Kingdom	5.2	5.0	5.6	4.6	4.5	4.2	4.3	4.0	4.1	4.1	3.9	
Others	15.1	13.7	12.0	14.7	14.7	15.9	17.6	19.1	16.7	13.5	14.1	
	Natural gas (based on terajoule (gross calorific value - GCV))											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Russia	39.4	35.6	35.2	38.3	38.6	45.3	41.2	41.6	43.7	41.8	40.4	
Norway	22.0	23.9	22.2	23.0	25.5	23.5	26.0	25.7	18.0	17.9	18.1	
Algeria	15.5	14.8	15.0	14.4	14.7	13.7	13.0	11.8	13.5	11.4	11.8	
Qatar	2.5	4.1	6.2	6.0	4.7	4.2	3.7	4.1	3.3	4.1	4.6	
Nigeria	4.2	2.6	4.4	4.5	3.5	1.9	1.6	2.2	2.2	2.7	3.0	
United Kingdom	2.8	3.4	3.8	4.3	3.6	3.1	3.3	4.2	2.8	3.0	2.4	
Libya	3.1	3.1	3.0	0.8	2.1	1.9	2.3	2.3	1.4	1.2	1.2	
Trinidad and Tobago	1.6	1.8	1.1	1.2	1.0	0.8	0.9	0.5	0.2	0.2	0.8	
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	
Peru	0.0	0.0	0.0	0.0	0.8	0.5	0.5	0.4	0.6	1.0	0.5	
Others	8.9	10.6	9.1	7.5	5.5	5.2	7.4	7.3	14.2	16.2	16.6	

Source: Eurostat (online data codes: nrg\_ti\_sff, nrg\_ti\_oil and nrg\_ti\_gas)

## Energy dependency rate for all products, 2008 and 2018

(% of net imports in gross available energy, based on tonnes of oil equivalent)



(¹) The bars are cut. The value in 2008 was -564.5 and in 2018 it was -593.2.

(²) 2008 data are not available.

\* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Source: Eurostat (online data code: nrg\_ind\_id)



# EU Energy Policy

- *„In its broadest sense, EU energy policy can be described as the pursuit of comprehensive energy security.*
- *To achieve this, the EU pursues three broad objectives:*
- *mitigating climate change (known commonly as sustainability),*
- *guaranteeing that energy is affordable for European customers,*
- *and achieving security of supply .“*

Schubert, Pollack & Kreutler (2016): 12.

# A typology of the EU's energy policy

## INTERNAL

Establishing the internal energy market

Nuclear power politics

Developing new energy technologies

## MULTIDIMENSIONAL

Reducing greenhouse gas emissions  
(mitigation of climate change)

## EXTERNAL

Energy diplomacy

Rule export



# ED EEP - Development

- 2000 (Green paper): **Towards a European strategy for the security of energy supply**
  - Internal vs. External
  - EU should be a leader in global energy dialogues
- 2000 – 2006: **Energy Initiatives**
  - 2000 EU – Russia Energy Dialogue; 2004 Black Sea and Caspian Sea Cooperation Initiative; 2004 bilateral political dialogue between the EU and OPEC; 2005 Energy Community; 2005 Memorandum of understanding on energy cooperation with Ukraine; 2006 - Memorandum of understanding on energy cooperation with Kazakhstan and Azerbaijan ....
  - Energy policy was not formally incorporated within the scope of CFSP!
- 2005 – 2007: **Energy 'Big Bang'**
  - External and internal factors
- 2006 (Green paper): **A European strategy for sustainable, competitive and secure energy**
  - **Strategic EU energy Review**

# ED EEP - Development

- 2008: **Second Strategic Energy Review – EU Energy Security and Solidarity Action Plan**
  - 2011: Communication - **On Security of Energy Supply and International Cooperation**
  - 2011: Communication - **On security of energy supply and international cooperation - The EU Energy Policy: Engaging with Partners beyond Our Borders**
- 
- **How to ensure security of supply?**
    - They wanted to
      - improve internal coordination by establishing an information exchange mechanisms on agreements between member states and suppliers;
      - rank its energy partners and treat them accordingly with appropriate instruments;
      - strengthen its external energy supplier partnerships (rule export);
      - mainstream energy in its development policy;
    - **2014 - Energy Security Strategy**
    - **2015 – Energy Union**

	With our neighbours / market integration partners	With our key energy suppliers and transit countries	With key energy players worldwide	With developing countries
Scope	All issues covered by the EU energy policy	Wide range of issues of common interest such as security of supply/demand, industrial cooperation, trade and investment issues...	Focus on priority issues like research and innovation, low carbon technologies, energy efficiency, standards...	Low emission development strategies, energy access, policy and regulatory frameworks, promotion of energy generation and transmission, renewable energy...
Instruments	Energy Community Treaty	Strategic energy dialogues	Ad hoc energy cooperation	Ad hoc energy cooperation
	Instruments under the European Neighbourhood Policy, crisis response instruments, and/or specific partnership and cooperation agreements, covering inter alia energy Energy Charter Treaty		Other applicable instruments	Instruments under the EU development policy and, where relevant, crisis response instruments
Trade Agreements				

# Challenges of the ED EEP

- 1) Planned to be based on solidarity and speaking with one voice (?)
- 2) Problems with definition of priorities and interests with regard to specific partners or energy projects
- 3) Divergences between particular Member States regarding the establishment of the common external energy policy
- 4) The role of the EU member states vs. Role of the Commission
- 5) Problems with the instruments and their recipients

# Problems with the instruments and their recipients

- 2020 – EU has:
  - 18 energy dialogues with individual countries,
  - 29 memorandums of understanding and declarations on energy cooperation,
  - 7 regional initiatives (covering the Eastern Partnership, Union for the Mediterranean, Africa, the Gulf Cooperation Council, ASEAN and the Caspian area, along with the Energy Community Treaty)

# Conceptualizing the policy field

- 1) Energy security or foreign energy policy
- 2) External dimension of the EU internal energy market
- 3) Intersection between energy policy and other foreign-policy aims

*What kind of international actor was EU emerging as?*

EU as a traditional power?

EU as a market power?

EU as a normative power?

# Energy security or foreign energy policy

- EU as a traditional power?
- Aim: Speaking with one voice
- The main idea: Rather than relying mainly on markets for security of supply, energy security (or foreign energy policy) connote a higher degree of political intervention
- Examples: Energy Diplomacy, Information exchange mechanism



# Is there an emerging EU energy diplomacy?

	Energy Diplomacy – Definition
Problem definition	Energy security as a (geo)political problem Over-reliance on markets; lack of strategic vision
Policy goals	Promote national interest; defend political sovereignty (unity/solidarity, in international institutions or alliances) Ensure energy supplies through strategic diversification and maintaining political trust with foreign suppliers
Policy instruments	Bilateral intergovernmental agreements (IGAs) in energy based on particular terms Political, legal, and economic tools to back strategic energy infrastructure projects or commercial agreements
Policy competences	Public authorities (including high-level political representatives and foreign affairs officials); energy companies (often state owned)

Source: Herranz-Surrallés 2015

## Information exchange mechanism on Intergovernmental Agreements (IGA)

- 2011- the EC issued a proposal asking for an information exchange mechanism in the field of energy
- **2012 - an information exchange mechanism was established (decision No. 994/2012/EU)**
  - did not grant powers to the Commission to vet the IGAs!
  - focus on the ex-post observation
  - South Stream case
- **2016 – EC proposal for revised information exchange mechanism on IGAs (2016/0031(COD))**
  - ex-ante compability assesment IGAs (veto!) + non-binding instruments (NBIs) - Adopted March 2017
  - Gas and oil x elektricity
  - excluded commercial contracts between commercial entities (which fall under the proposed security of supply regulation) and nuclear fuel (for which Article 103 of the Euratom Treaty provides an ex-ante procedure).

# EU – Russia Energy Relations

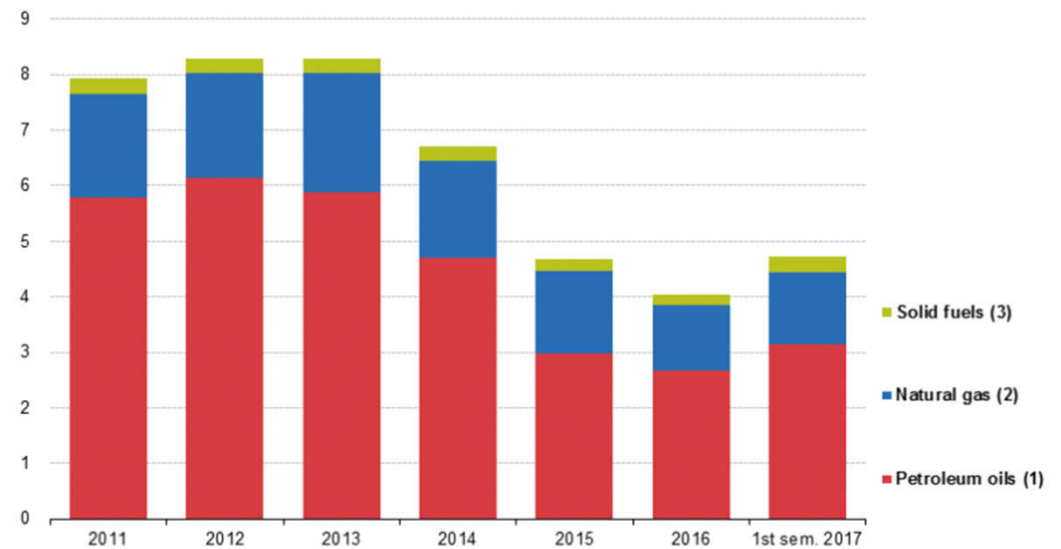
## Legal basis for EU – Russia energy cooperation

- Partnership and Cooperation Agreement (PCA)
- Energy Charter Treaty (ECT)
- Partnership for Modernisation
- EU-Russia Energy Dialogue
- EU acquis communautaire

## Results

- Early Warning Mechanism (EWM)
- Gas Advisory Council (GAC)

„If not energy, then where?“



(1) Product codes: 27090010 and 27090090

(2) Product codes: 27111100 and 27112100

(3) Product codes: 2701, 2702, 2703, 2704

# EU–Russia Energy Dialogue

- Dialogue was launched in Paris at the EU–Russia Summit on 30 October 2000 as a part of the PCA Framework
- EU ambition: to have a legally binding agreement with the main aim to create new European Coal and Steel Community (ECSC) with Russia.
- 4 thematic groups:
  - **Energy strategies, forecasts, and scenarios group**
  - **Market developments group**
  - **Energy efficiency group**
  - **Gas Advisory Council**
- Minimal progress mostly due to the external factors:
  - EU enlargement
  - Putin's power vertical in Russia
  - Ukrainian crisis 2006/2009...
- 2014 - EU suspended the Energy Dialogue due to Russia's annexation of the Ukrainian peninsula of Crimea

# EU – Russia Energy Relations

## **Problematic points**

- Legal pressure on Gazprom
- Sanctions targeting the Russian oil sector
- Trade disputes:
  - MOL case

## **Limits of the coherent EU Policy**

- Lack of more competences in energy policy
- Problems in institutional dimension

# EC x Gazprom

- **September 2011** - EU antitrust officials made unannounced inspections of the energy companies in 10 CEE MS
- **September 2012** – EC opened formal proceedings against Gazprom for allegedly violating EU competition rules (abusing its dominant position in CEE's gas supply markets)
- **April 2015:** the Commission sent a Statement of Objections to Gazprom.
  - Gazprom breached EU antitrust rules by pursuing an overall strategy to partition gas markets along national borders in eight Member States (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia).
  - This strategy may have enabled Gazprom to charge higher gas prices in five of these Member States (*Bulgaria, Estonia, Latvia, Lithuania and Poland*).
- **May 2018** - Commission has decided to **make these obligations (so-called "commitments") legally binding on Gazprom** (under Article 9 of the EU's antitrust Regulation 1/2003).
  - **No more contractual barriers to the free flow of gas**
  - **Obligation to facilitate gas flows to and from isolated markets**
  - **Structured process to ensure competitive gas prices**
  - **No leveraging of dominance in gas supply**
  - If a company breaks any of these obligations, the Commission can impose a fine of up to 10% of the company's worldwide turnover, without having to prove an infringement of EU antitrust rules.
  - Unlike with competition inquiries into other companies like Google and Intel, it declined to issue any financial penalties (criticism).
- **September 2021** – another investigation?
  - Gazprom's role in soaring European gas prices, saying the company's behaviour had made them suspect market manipulation.

# MOL case

- June 2007 – ÖMV made an unsolicited bid to take over MOL
- March 2009 - Surgutneftegaz announced that will pay €1,4 billion to buy 21,2% stake in Hungary's oil and gas group MOL from ÖMV
- 2011 - Hungary has bought back a 21.2 percent stake in oil and gas company MOL (profit € 500 million)



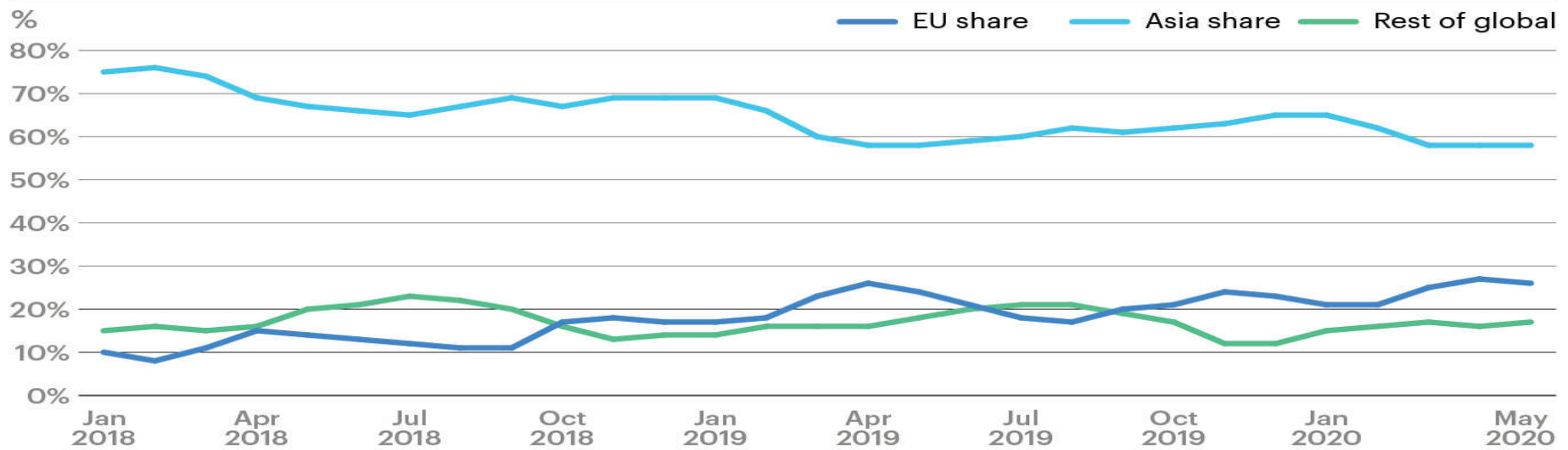
# Powers and tools of the EC

## 1) Management of external relations and dependency

- Support of diversification.
  - Diversification of fuels.
  - Diversification of suppliers.
  - Diversification of transit routes.
- Strategic reserves of oil and gas.
- Export of energy acquis communautaire via network of bilateral, multilateral and global treaties covering (to some extent) energy issues.

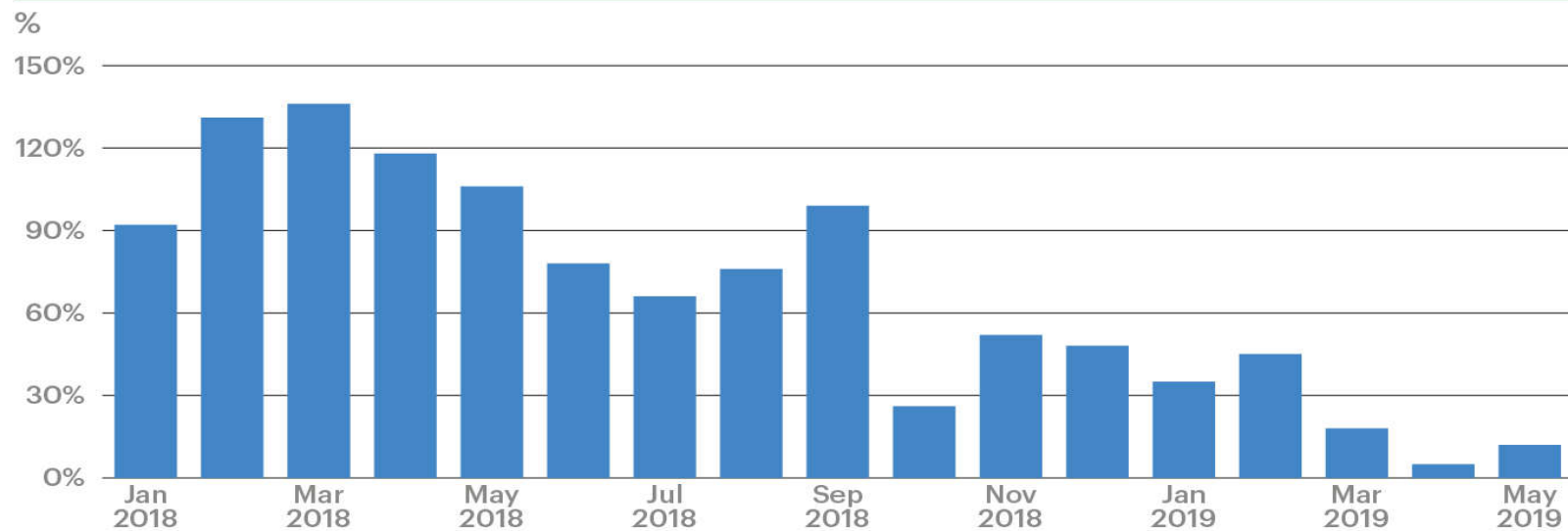
## 2) Improvement of the EU's internal resilience using Internal energy market mechanisms.

## Europe's Import Share of Global Lng is Growing



Source: ICIS, LNG Edge

## European LNG Growth Year on Year in Terms of Volumes Imported Has Been Slowing



Source: LNG Edge

# Nabucco pipeline

Preparation started in 2002.

- In 2003 EU provided support in the amount of 50% of estimated costs of the feasibility study.
- 2005 joint venture agreement.
- Preparation work collapsed in 2013, after the announcement of Azerbaijan to supply TAP instead.

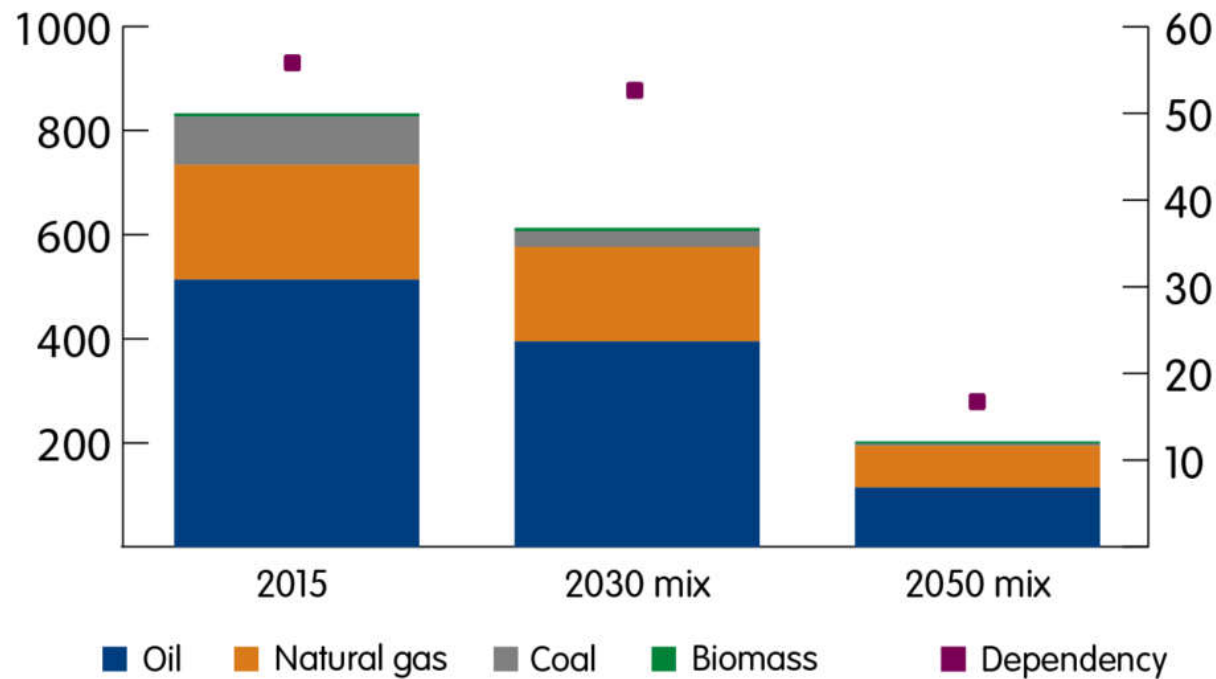


# Strategic reserves of oil and gas

- **Strategic reserves of crude oil and petroleum products – Directive 2009/119/EC**
  - MS are obliged to ensure a total level of oil stocks corresponding to the
  - 90 days of average daily net imports or
  - to the 61 days of average daily inland consumption, whichever of the two quantities is bigger.
- **Regulation No 2017/1938 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010**
  - **No 994/2010:** Resolves the situation in case when the single largest gas infrastructure of country fails, which is the so called N-1 scenario. In such case, the regulation obliges the MS to ensure the supply for protected customers (mostly households + hospitals...).
  - **No 2017/1938:** includes a new `solidarity principle` according to which countries will need to help neighbouring countries, to which they are directly connected, to provide gas to vulnerable customers in case of an extreme supply shortage.

# The geopolitics of the European Green Deal

**Evolution of EU energy imports** 55 percent lower emissions in 2030 compared to 1990 and climate neutrality in 2050



Source: Bruegel/ECFR based on European Commission (2020) MIX scenario  
ECFR · ecf.eu

# The geopolitics of the European Green Deal

- Political impacts:
  - repercussions for oil- and gas-producing countries in the EU neighbourhood;
  - repercussions on global energy markets;
  - repercussions for European energy security;
  - repercussions for global trade, notably via carbon border adjustment measures (CBAM)

# Repercussions for oil- and gas-producing countries in the EU neighbourhood

- Reducing investment in new fossil fuel infrastructure and reducing maintenance efforts for existing infrastructure.
- Role of gas imports from Russia
- Surge in trade in green electricity and green hydrogen (Middle East, North Africa, Ukraine, etc.)
  - new energy security concerns?



# Repercussions on global energy markets;

- Europe is the world's second-largest net importer of oil, after the Asia-Pacific => impact on the global oil market, notably by depressing prices.
- Differences between low-cost oil producers (Saudi Arabia and Iraq) x rest of oil producers (Russia, Venezuela, and Nigeria)

## Break-even oil price in \$/barrel, selected countries, 2015



Source: OECD  
ECFR · ecf.eu

# Repercussions for Europe's energy security

- Solving the old concerns ...
  - Europe's core energy security concern has been its dependence on Russian natural gas.
  - EU import bill will be solved (€296 billion in 2018)

## EU imports of natural gas by main trading partner 2018



Source: Bruegel/ECFR based on Eurostat (2020)  
ECFR · ecfre.eu

# Repercussions for Europe's energy security

- But creating the new ones...
  - import of the minerals and metals needed for the manufacturing of solar panels, wind turbines, lithium-ion batteries, fuel cells, and electric vehicles.
  - Europe itself has no significant mining and processing capacities for these critical raw materials (around 3 per cent of the overall raw materials required in lithium-ion batteries and fuel cells)

## Main suppliers to the EU of critical raw materials average from 2010-2014

China Russia USA Mexico Brazil France Indonesia Morocco  
Kazakhstan Turkey Norway Nigeria Finland



Source: Bruegel/ECFR based on European Commission (2017)  
ECFR · ecf.eu

# Repercussions for

- CBAM

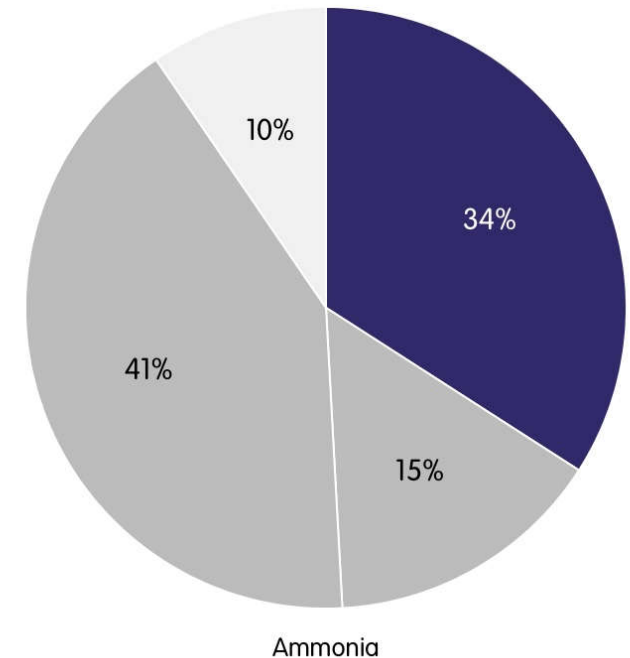
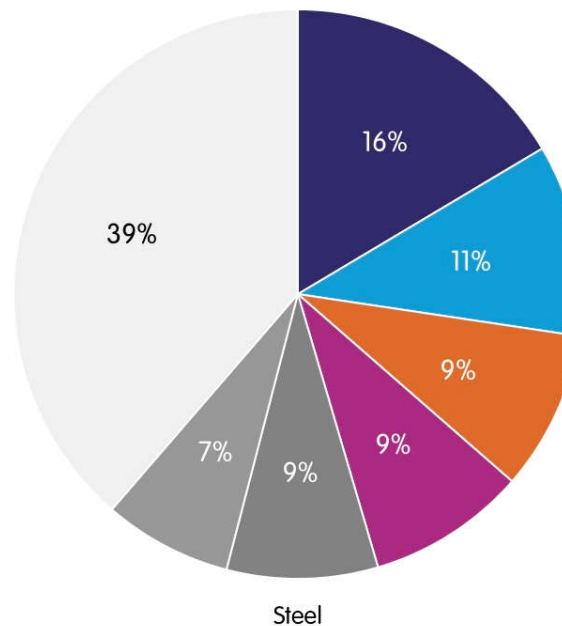
- Aim:

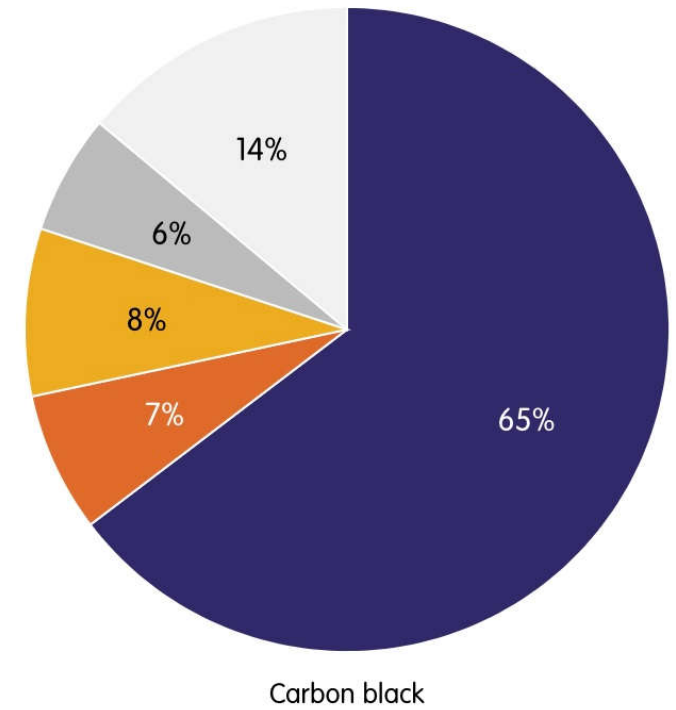
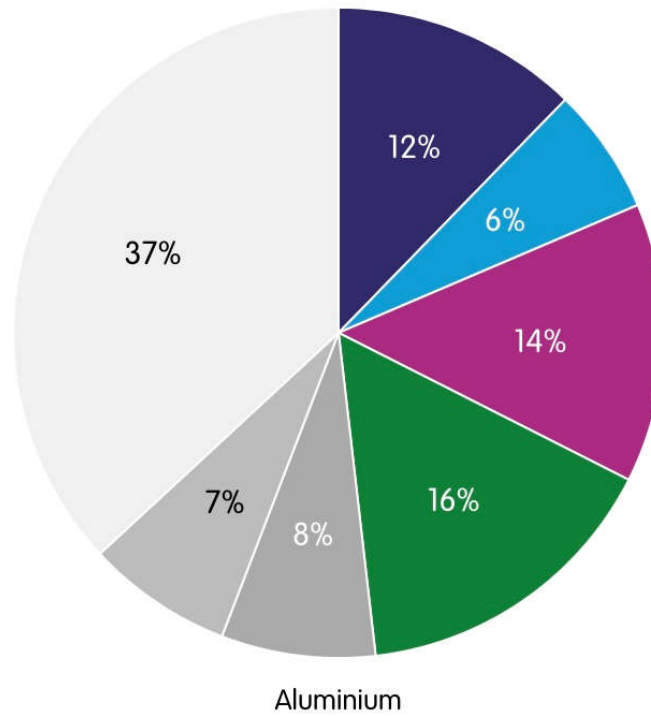
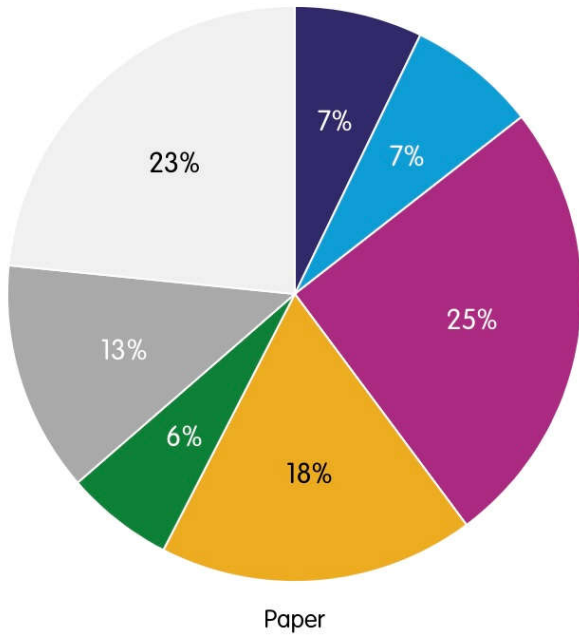
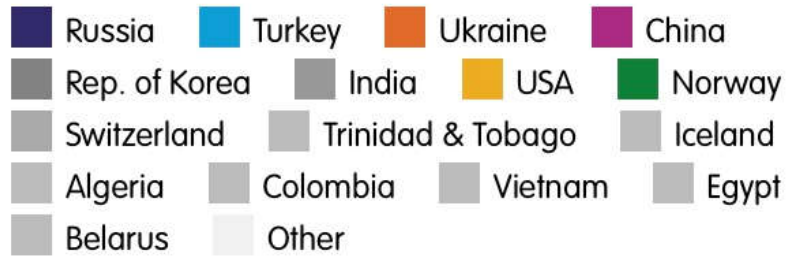
- Preventing carbon leakage
    - Incentivising other countries across the world to decarbonise

- Challenges:

- Technical nature - How to calculate the emissions content of imports? (all emissions along the entire value chain)
    - Geopolitical challenge – compatibility with WTO rules reactions from countries that export emissions-intensive goods to Europe

**EU27 imports of carbon-intensive goods by country of origin share of imports**





trade data for 2018

Source: Bruegel/ECFR based on UN Comtrade  
ECFR · ecf.eu

**Thank you for your attention!**

zapletalova@gmail.com