

Greening the Financial System

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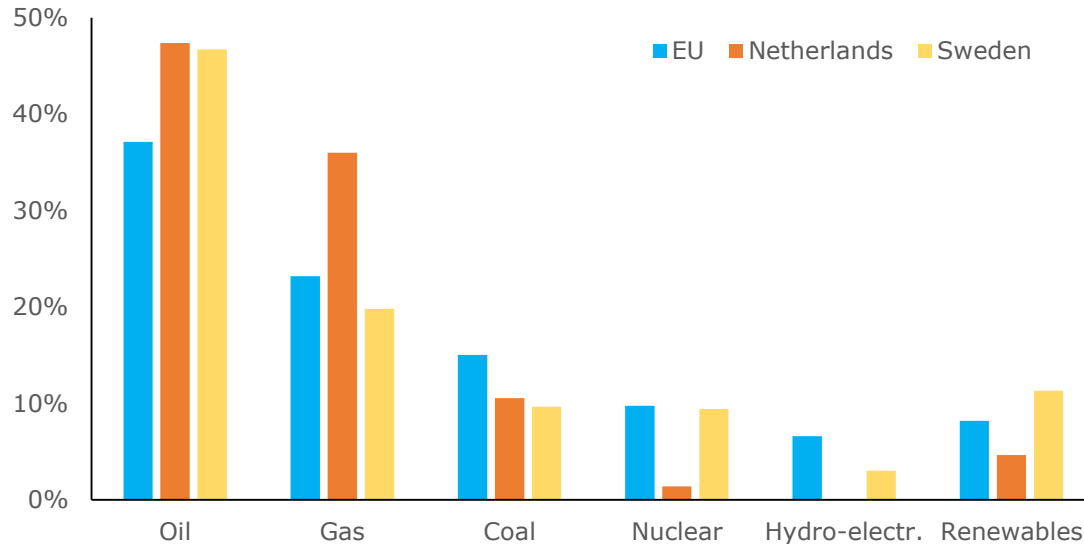
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DeNederlandscheBank

EUROSYSTEEM

Climate change is one of the biggest challenges facing our economy

Economy still reliant on oil and gas
(% of total energy consumption in 2017)

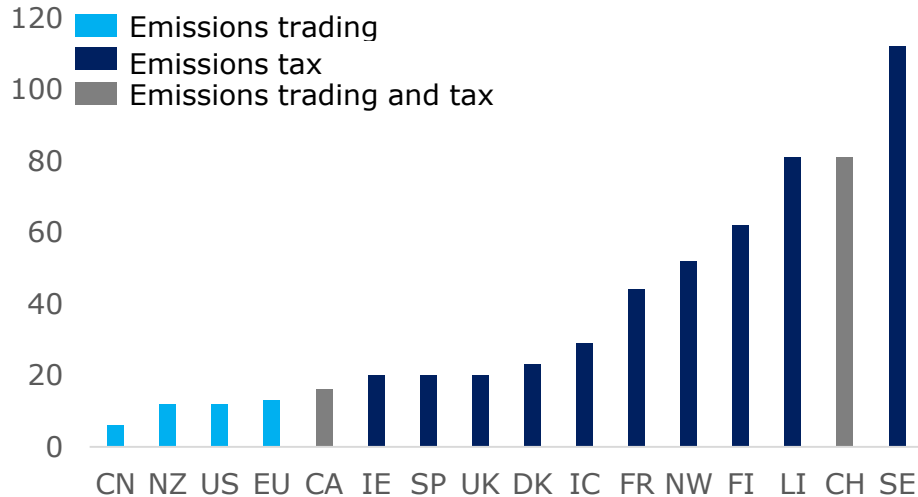


Source: BP Statistical Review of World Energy 2018

Role of Governments / EU

Effective carbon pricing (price, scope, and system)

Price (€/tonne of CO2)

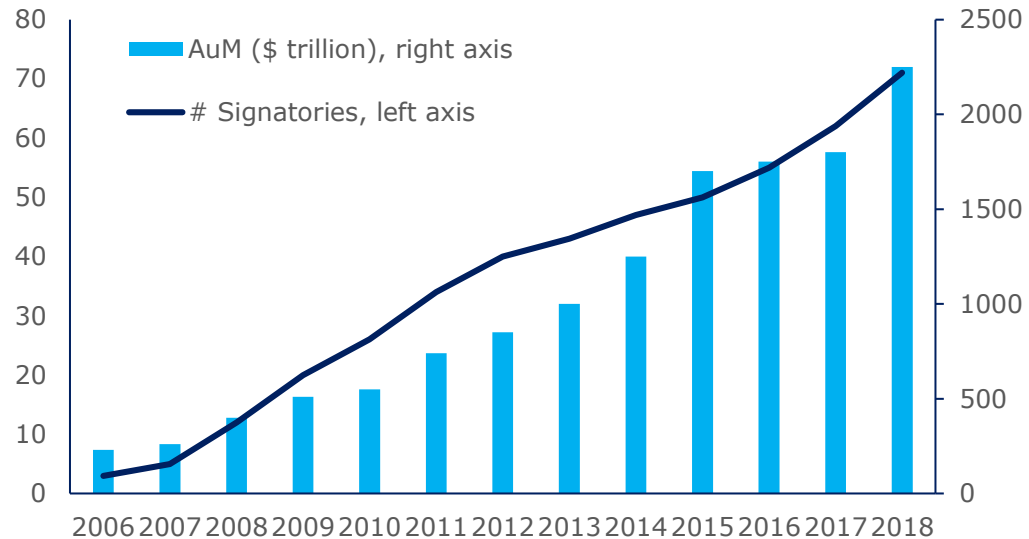


Country	Coverage (% total emission)
Spain	0-10%
Iceland	20-30%
Liechtenstein	20-30%
UK	20-30%
China (various regions)	30-40%
France	30-40%
Finland	30-40%
Switzerland	30-40%
Denmark	40-50%
EU	40-50%
Ireland	40-50%
Sweden	40-50%
New Zealand	50%
Canada (various regions)	40-70%
Norway	60-70%
USA (various states)	60-90%

Role of Central Banks

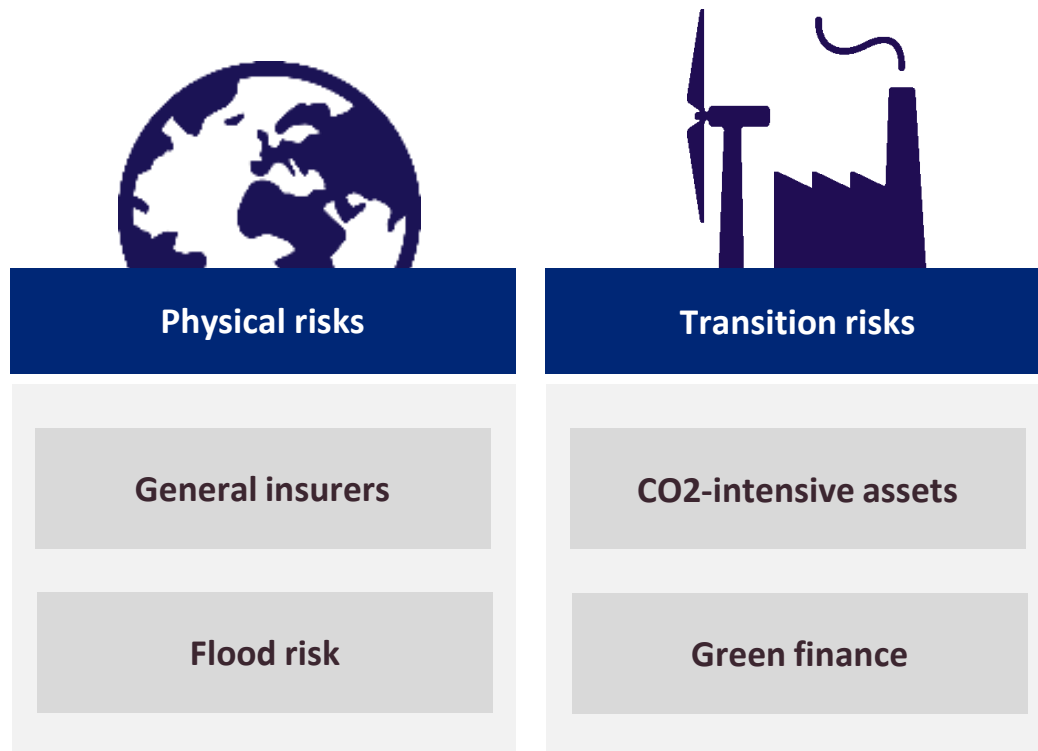
- Direct impact of incorporating ESG in CB reserves management is limited;
- But it is important signal to financial sector (“practice what you preach”);
- DNB signed PRI and published Charter on ESG in reserve management

Growing number of investors committed to PRI




Source: PRI website

Role of supervisors




Supervisors' and central banks' call for action

Central banks and supervisors


- 1. Integrating climate-related risks into financial stability monitoring and micro-supervision.


- 2. Integrating sustainability factors into own-portfolio management.

- 3. Bridging the data gaps.

- 4. Building awareness and intellectual capacity and encouraging technical assistance and knowledge sharing.

Policy makers

- 5. Achieving robust and internationally consistent climate- and environment-related disclosure.

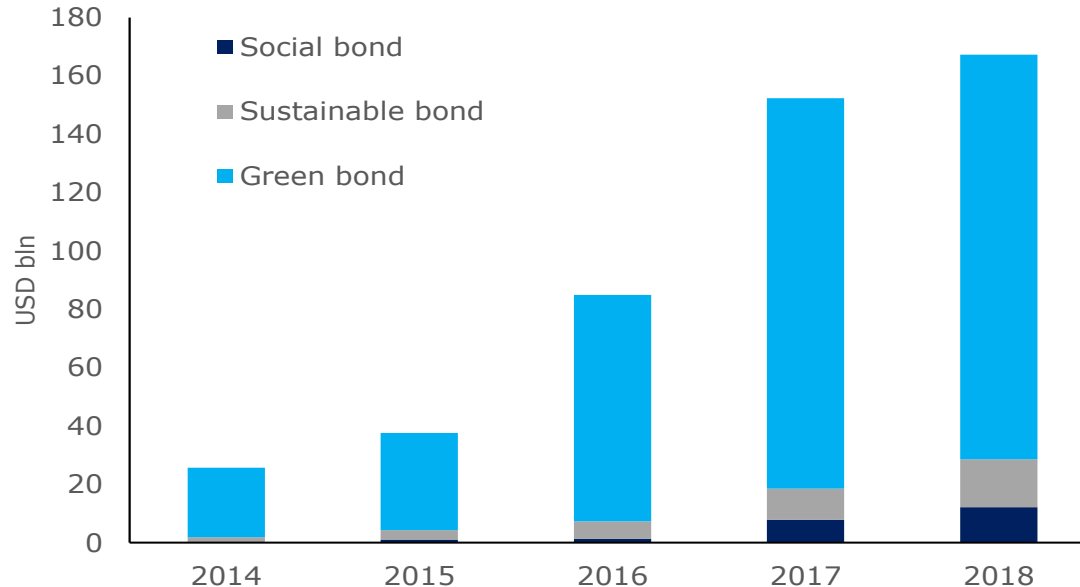
- 6. Supporting the development of a taxonomy of economic activities.



Role of financial markets

Rapid growth of green, sustainable and social bond markets...

- Green bond market rapidly growing
- Social and sustainability bond supply is up 95% YoY so far in 2019



Role of financial markets

...but the market needs to be further stimulated and regulated

- **€180 billion per year:** estimated additional annual investment needed in the EU to meet its climate targets for 2030
- **Clarity on what is “green / sustainable”**
 - EU Taxonomy
 - EU Green bond standard
 - EU Benchmark for low-carbon investment strategies
 - Climate-related disclosures
 - ESG scores by rating agencies
 - Information in issuers’ prospectus