

Workshop
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Round table 1

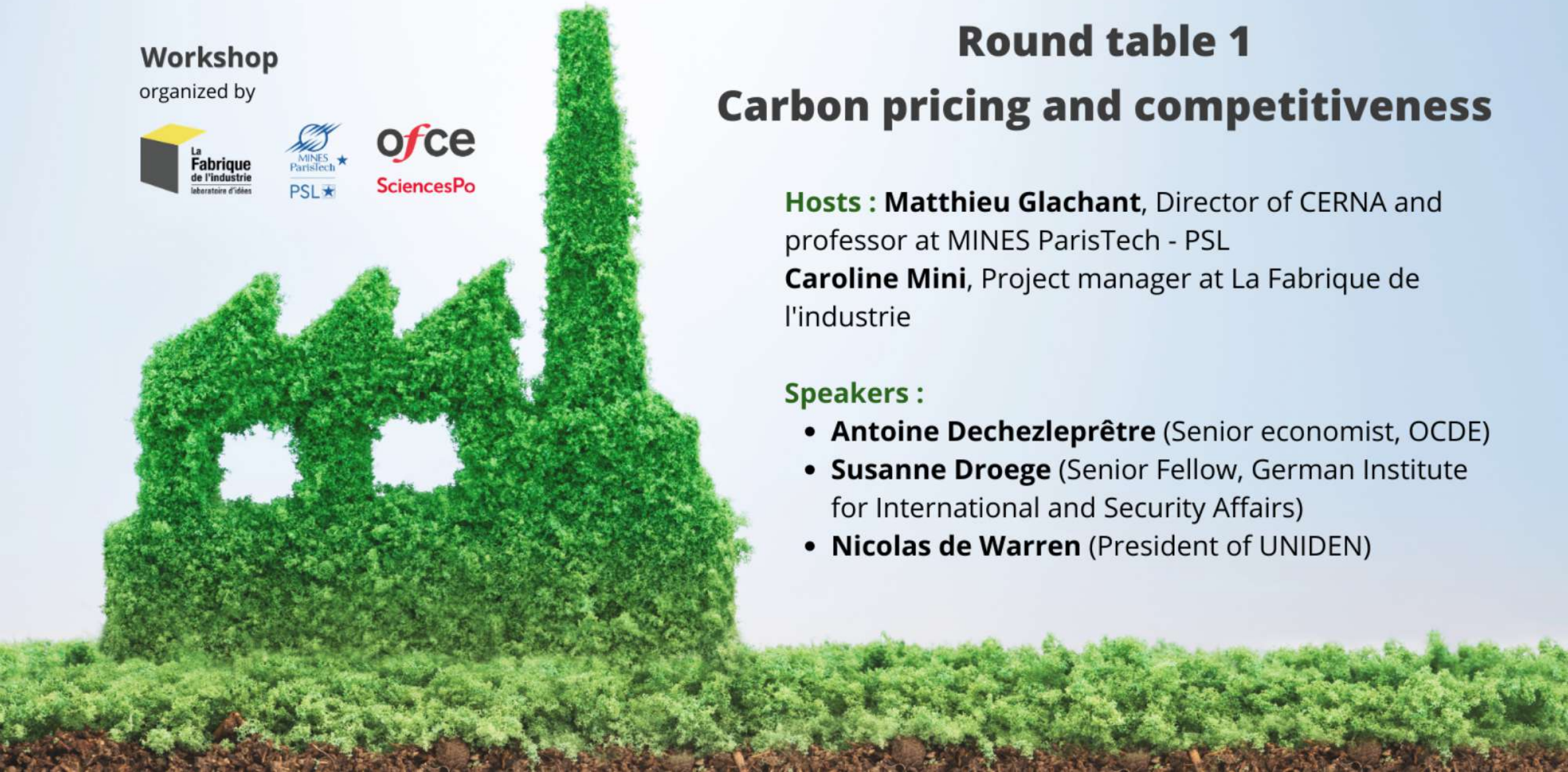
Carbon pricing and competitiveness

Hosts : **Matthieu Glachant**, Director of CERNA and professor at MINES ParisTech - PSL

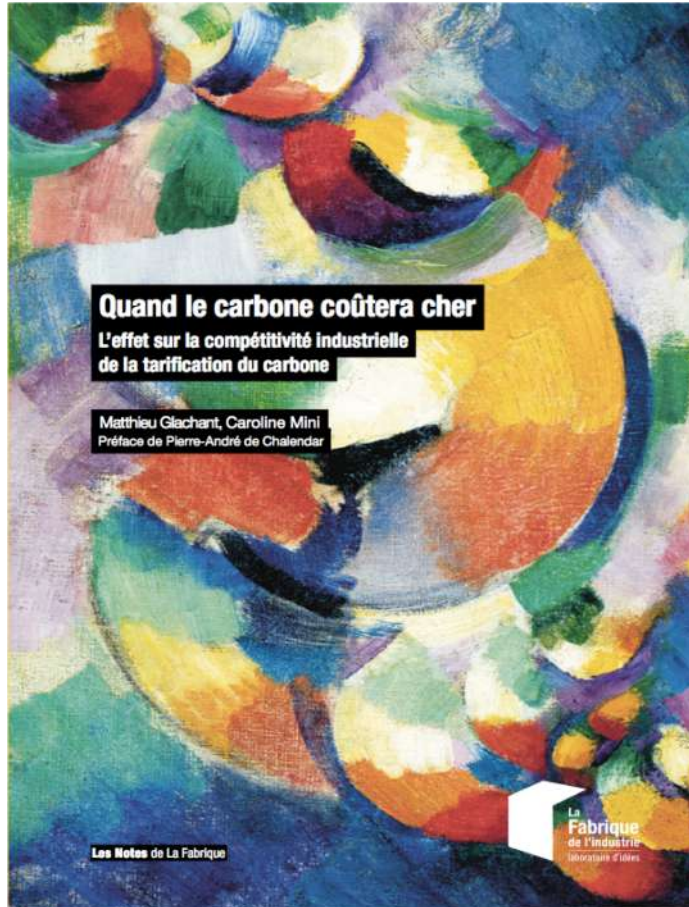
Caroline Mini, Project manager at La Fabrique de l'industrie

Speakers :

- **Antoine Dechezleprêtre** (Senior economist, OCDE)
- **Susanne Droege** (Senior Fellow, German Institute for International and Security Affairs)
- **Nicolas de Warren** (President of UNIDEN)



What impact of carbon pricing on competitiveness?



Synthesis of recent econometric studies on

Ex post impact of **EU Emissions Trading System (ETS)** from 2005 to 2012

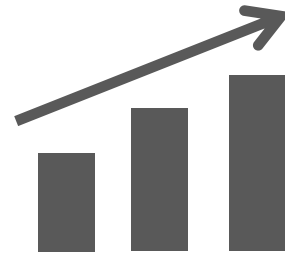
Empirical effect of **energy price variations** on manufacturing sector

Context



Around **25 €/tCO₂** on the EU ETS

A national carbon tax at **44,6 €/tCO₂**



Increase in carbon price

The value of climate action estimated at **250 € in 2030** (Commission Quinet II)



55 % reduction of GHG emissions by 2030

EU objective of **carbon neutrality** by 2050

EU Green Deal

The effects of the European carbon market have been positive

No negative impacts on industrial competitiveness
(revenues, profits, importations, exportations, employment)

10 % reduction in GHG emissions between 2005 and 2012 due to the carbon market

Carbon leakage that remained limited

10 % increase in low carbon technology patent filing between 2005 and 2009

The impact on competitiveness would remain limited up to 100 €/tCO₂

Results based on the empirical effect of energy price variations on competitiveness	Sources
<p>No impact on net manufacturing employment in France</p> <p>But reallocation of workers</p>	Dussaux (2020)
<p>No impact on net manufacturing employment</p> <p>Modest negative impact on total factor productivity</p> <p>Modest increase in foreign direct investments in countries with a lower energy price</p>	<p>Hille et Möbius (2019)</p> <p>Marin et Vona (2019)</p> <p>Saussay et Sato (2018)</p>

— No effect on net manufacturing employment

But **reallocation of workers** toward companies and less energy-intensive sectors

Differentiated impacts among sectors

Without taking into account indirect job creations

— Above 100 €/tCO₂



Measures are needed to address carbon leakage

Two objectives :

Address **carbon leakage** concerns

Level the playing field between EU producers and foreign competitors

— Carbon border adjustment mechanisms

Discussions are ongoing on **carbon border adjustment mechanisms** at the European Commission to deal with asymmetric climate policies

A way to **incentivize third countries** to adopt comparable measures to fight climate change

These measures cover multiple technical aspects to solve

Additional measures exist to create a low carbon market (R&D subsidies, product norms, climate conditions in international agreements, ...)