Creating markets for climate neutral materials and the role of EU industrial policy

High-level virtual conference
11 May 2021
Welcome

Eliot Whittington
Director, CLG Europe
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Speakers/Participation</th>
</tr>
</thead>
</table>
| 10.15 | Welcome and Setting the scene:            | Eliot Whittington, Director, CLG Europe  
Dr. Patrick Graichen, Executive Director, Agora Energiewende |
|       | ‘Tomorrow’s markets today’                |                                                                                        |
| 10.40 | Keynote speech                            | Elisabeth Winkelmeier-Becker, Parliamentary State Secretary, Federal Ministry for Economic Affairs and Energy, Germany |
| 10:55 | Business reflections                      | Peter ter Kulve, President of Home Care, Health & Wellbeing, Unilever  
Magali Anderson, Chief Sustainability and Innovation Officer, LafargeHolcim  
Thomas Ingenlath, Chief Executive Officer, Polestar (recorded statement) |
| 11:10 | High-level discussion                     | Elisabeth Winkelmeier-Becker, Parliamentary State Secretary, Federal Ministry for Economic Affairs and Energy, Germany  
Peter ter Kulve, President of Home Care, Health & Wellbeing, Unilever  
Magali Anderson, Chief Sustainability and Innovation Officer, LafargeHolcim  
Dr. Patrick Graichen, Executive Director, Agora Energiewende |
<table>
<thead>
<tr>
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<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.30</td>
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</tr>
<tr>
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</table>
Presentation of the report

*Tomorrow’s markets today: Scaling up demand for climate neutral basic materials and products*

Dr. Patrick Graichen
Executive Director, Agora Energiewende
Tomorrow’s markets today: Scaling up demand for climate neutral basic materials and products

Report Launch Event 11/05/2021

Dr. Patrick Graichen, Executive Director, Agora Energiewende
1. Project Context
At 16% of annual CO$_2$ emissions, industry is an urgent priority for the EU climate policy.
The European Council has called for the Commission to...

“propose measures that enable energy-intensive industries to develop and deploy new climate neutral technologies while maintaining their industrial competitiveness.”

- European Council Conclusions, 10-11 December 2020
2. Project Aims and Scope
Industry transition must address the full value chain—but market demand for climate neutral, material efficient & circular solutions is a crucial, still missing, policy component.
Industry transition must address the full value chain – but *market demand* for climate neutral, material efficient & circular solutions is a crucial, still missing, policy component.
Aims of the study:

→ Explore role of “demand-side policies” in the transition to climate neutral industry

→ Understand needs of progressive European industrial companies

→ Identify specific options for policy makers under EU Green Deal
3. Business leadership, barriers faced and the role of EU policy
Basic material and final product producers are looking to develop climate neutral solutions and supply chains.

**Examples:**

- **HYBRIT**
  - FOSSIL-FREE STEEL
- **Carbon2Chem**
- **Tree to Textile**
- **Polestar 0 Project**
- **tkH2Steel**
- **WEWOOD Community**
- **Coca-Cola Sets Ambitious New Sustainable Packaging Goals for Western Europe**
- **Unilever The Carbon Rainbow**
- **ECOPact The Green Concrete**
- **Volvo Cars aims for 25% recycled plastics in cars from 2025**
However, despite impressive voluntary efforts, companies report barriers to scaling up and aiming for CO2 neutrality

1. **Missing business case to scale up climate neutral technologies**
   - Suppliers need a broader willingness-to-pay from downstream to scale up deployment

2. **Non-cost barriers to purchasing climate neutral materials, e.g.**
   - A lack of comparable data from suppliers on embedded CO$_2$
   - Conservatism and risk aversion towards new materials (e.g. construction sector)
   - Outdated product regulations limiting market entry (e.g. concrete standards)

3. **Missing incentives to unlock a full set of decarbonisation levers along the value chain, e.g.**
   - Material efficient design and manufacture
   - Increased material circularity
   - Use of innovative materials
   - Etc
However, despite impressive voluntary efforts, companies report barriers to scaling up and aiming for CO2 neutrality.

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   - Increased material circularity.
   - Use of innovative materials.
   - Etc.

**Important:**
A higher carbon price does not address many of these barriers.
4. Policy priorities and options
Three policy priorities to address three key barriers...

→ **Priority 1.** Put limits on embedded life cycle emissions in material-intensive final products and reduce over time.

→ Justification: unlocks demand for full set of decarbonization options (material efficient design, circular and low-CO2 virgin materials) without distortions of intermediate product markets.
Priority 1 (cont.) Cost of climate-neutral materials would be a small fraction of final product prices for consumers, but pays upstream green premium.
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How could this be implemented?

→ Ecodesign Directive (revised end 2021)
→ Energy Performance in Buildings Regulation (2022)
Priority 2. Require reporting of embedded carbon data for key value chains and create standardised CO2-rating labels for basic materials.

- Justification: For limits on embedded carbon to work, downstream purchasers must have transparent and comparable data.
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How could this be implemented?

→ EU Sustainable Products Initiative (2021/22)
→ E.g. Constructions Products Regulation
→ E.g. reinforced Product Environmental Footprinting standards

• Justification: For limits on embedded carbon to work, downstream purchasers must have transparent and comparable data.
Priority 3. Targeted policies to overcome specific barriers to market entry for innovative or circular solutions

• Justification: Effective competition between climate neutral and circular materials requires a portfolio of solutions.

• In some cases, targeted supply or demand side policies needed to overcome these barriers.

• Solutions can include Carbon Contracts for Difference, public procurement requirements or circular material quotas.

• Must be targeted, time-limited to avoid long-term distortions
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- In some cases, targeted supply or demand side policies needed to overcome these barriers.
- Solutions can include Carbon Contracts for Difference, public procurement requirements or circular material quotas.
- Must be targeted, time-limited to avoid long-term distortions.

How could this be implemented?

→ CCfDs (reformed ETS Innovation Fund)
→ Recycled material quotas under waste legislation (Circular Economy Action Plan) (2021-23)
→ Public Procurement Requirements via relevant sectoral legislation.
Summary: three mutually reinforcing policy interventions

1. Final products
   - Ecodesign and public procurement requirements on embedded CO₂

2. Basic & intermediate products
   - Harmonised data reporting requirements, standardised labels/comparison tools

3. Basic materials
   - Early-stage support for recycled and innovative basic materials' with high market entry barriers

Source: Agora-Energiewende, CLG Europe & WBCSD (2021)
4. A comment on the updated EU industrial strategy
The updated Strategy identifies a need for demand side policies to make a business case for scaling investment in climate neutral materials production.

However, the Strategy does not point to any concrete legislative measures to do so. It mentions supply side policies like EU-level CCfDs, etc. Good, but not sufficient...

The accompanying Steel Sector Analysis suggests that the Ecodesign and Construction Products Regulation could be revised to include embedded carbon standards for steel.

But it is not clear if *regulatory limits* on embedded CO$_2$ emissions are intended, or simply reporting standards (i.e. better data). **We will need both.**
Thank you for your attention

Dr. Patrick Graichen
Executive Director, Agora Energiewende
11/05/2021
Keynote speech

Elisabeth Winkelmeier-Becker
Parliamentary State Secretary, Federal Ministry for Economic Affairs and Energy, Germany

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Business reflections

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Further reflections
Opening the section ‘Further reflections’

Dr. Martin Porter
Senior Strategic Adviser to CLG Europe and Executive Chair in Brussels for CISL
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Closing remarks

Eliot Whittington
Director, CLG Europe
Thank you.