

BETWEEN CLIMATE ACTION AND COMPETITIVENESS: LEAD MARKETS AS A TOOL OF EU GREEN INDUSTRIAL POLICY

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with results from joint work with Leon Martini, Nora Kögel (Ecologic Institute) and Lena Kittel (IER Stuttgart)

OUTLINE OF THIS SESSION

- › Welcome & Introduction (5 mins)
- › Inputs from the Ariadne Project by Benjamin Görlach, Ecologic Institute and Darius Sultani, Potsdam Institute for Climate Impact Research (20 mins)
- › Responses from discussants (5 mins each):
 - › Philipp Tschinke, Salzgitter AG
 - › Karl Thies, CEMEX Cement
 - › Suzana Carp, Cleantech for Europe
 - › Marzena Rogalska, DG CLIMA
- › General discussion

Housekeeping: Chatham House rule, priority for questions from participants in the room



Input based on new policy paper
*Between Climate Action and Competitiveness:
Towards a coherent industrial policy in the EU.
Principles for an EU industrial policy for climate
action*

GREEN LEAD MARKET AS A CORE ELEMENT OF THE CLEAN INDUSTRIAL DEAL?

- › Green lead markets announced as a new initiative within Clean Industrial Deal
- › Several arguments in favour of Green Lead Markets at EU level:
 - › Compatible with the DNA of the EU – serve to better leverage the potential of the single market (Draghi, Letta reports)
 - › Some anchors in existing tools and regulations – Ecodesign, EPBD, CPR, ...
 - › Complement existing supply-side instruments to create demand for low-carbon products – carbon price and CBAM alone will not create sufficient demand soon
 - › Depending on implementation, will leverage private demand and thus require less public funding – attractive in times of tight public budgets.

“We will put forward an Industrial Decarbonisation Accelerator Act to support industries and companies through the transition. This will channel investment in infrastructure and industry, in particular for energy intensive sectors. **It will support European lead markets for the development, production and diffusion in industry of clean tech.**”

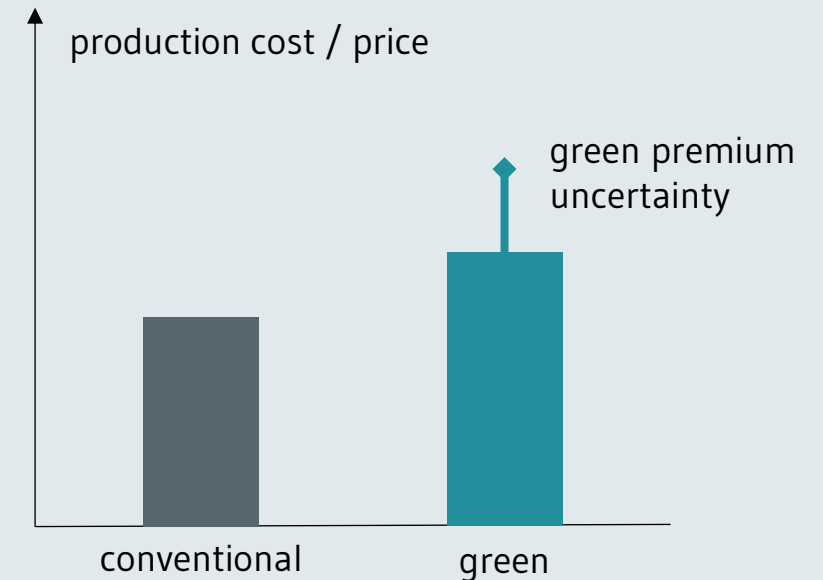
U. v.d. Leyen, Political Guidelines for the next European Commission, 18/7/2024

“You will work to boost investment, create **lead markets for clean tech** and put in place conditions for companies to grow and compete globally. As part of this, you will present an Industrial Decarbonisation Accelerator Act, to support **European lead markets for the development, production and diffusion of clean tech in industry** and speed up related planning, tendering and permitting processes, in particular for energy intensive sectors”

Mission Letter to Stéphane Séjourné, 17/9/2024

FUNCTIONS OF GREEN LEAD MARKET INSTRUMENTS

- › Creation of separate market segment for green products, i.e. as substitute for conventional fossil-based products
- › Signalling: trust in “green” product criteria (e.g. standards, certification)
- › Reduce demand uncertainty for green producers
- › Potentially (!) bridge cost gap via green premium
- › Scale-up demand beyond voluntary green procurement (Fair Trade, Ecolabels, green electricity)









➔ GLM as a transitional tool: green products eventually become the norm, demand driven by relative cost advantages of green route as compared to conventional route (green cost reductions + carbon price increase).

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KEY PRINCIPLES FOR INDUSTRIAL POLICY DESIGN AND INSTRUMENTATION

See Martini, Leon, Benjamin Görlach, Lena Kittel, Darius Sultani and Nora Kögel (2024). Between climate action and competitiveness: towards a coherent industrial policy in the EU. Ecologic Institute, Berlin.

6 Principles for Industrial Policy Instruments	
1. Address specific market failures with targeted instruments	
2. Prioritise industrial policy where it adds value	
3. Develop policies that address value chains and market integration	
4. Design and implement support measures at EU level	
5. Allocate support through competitive mechanisms and equip policies with clear conditionalities and sunset clauses	
6. Embed EU industrial policy in a strategy for outreach and diplomacy, bilateral cooperation, and trade	



APPLICATION OF GUIDING PRINCIPLES TO THE CASE OF GREEN LEAD MARKET INSTRUMENTS (1/2)

Guiding principle for industrial policy	Application to green lead markets
Address specific market failures.	Lead market instruments better suited to <u>address innovation externality</u> (spillover effects), as EU ETS is targeted towards emissions externality. Firms should remain primary actor to deal with risk where they can, but lead markets are helpful to <u>reduce demand uncertainty</u> when this is not the case (i.e. when risk markets are incomplete).
Prioritise where it adds value.	Key levers (and technologies) for the road to net zero are thoroughly analysed, so choose lead markets wisely. Technology openness is not a principle for successful industrial policy.
Address value chains and market integration.	Lead markets are specifically designed for market integration, but careful consideration needed as to <u>which step of the value chain</u> instruments should be targeted at.

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APPLICATION OF GUIDING PRINCIPLES TO THE CASE OF GREEN LEAD MARKET INSTRUMENTS (2/2)

Guiding principle for industrial policy	Application to green lead markets
Design and implement at EU level.	Implementation at EU level to leverage single market is the obvious choice. Depending on actual design choices, however, <u>distributive impacts between MS</u> , both for supporting policies (public procurement) and for more demanding policies (quotas) might have to be considered.
Allocate through competitive mechanisms and equip policies with clear conditionalities and sunset clauses.	For the more obvious implementation options, <u>lead markets are competitive in their nature</u> . Conditionalities on additional social benefits could be included. Sunset clauses required to <u>prevent excessive support</u> when green alternatives become competitive (further down the road).
Embed in a strategy for outreach, diplomacy, bilateral cooperation, trade.	International standards are most obvious application. However, also an opportunity for joint public procurement. Communicate to <u>prevent worst-case scenario of being perceived as protective measure</u> (see e.g. CBAM). Risk of resource shuffling needs to be considered, as well.

HOW AND FOR WHICH PRODUCTS COULD LEAD MARKETS WORK?

› Green lead markets most suitable for products

(i) that account for a significant share of (embedded) emission from industry;

(ii) for which low-emission or near-zero-emission production methods are market-ready and can be deployed at scale

(iii) for which there is willingness to pay, or for which demand can be created

GLM for upstream products	GLM for downstream products
Targets emission-intensive primary materials: allows to target and support specific reduction options or technologies.	Targets final products, ideally consumer-facing: potentially addresses a wider range of abatement options along the value chain
Price increase compared to conventional production more noticeable.	Price increase compared to conventional product modest (1-3 % for cars or buildings), higher WTP for consumer-facing products
Accounting of embedded emissions (relatively) easier	Tracking of embedded emissions challenging for complex value chains
Examples: steel, cement, parts of chemical industry (plastics, ammonia)	Examples: buildings, cars and vehicles, packaging, wind turbines, ...

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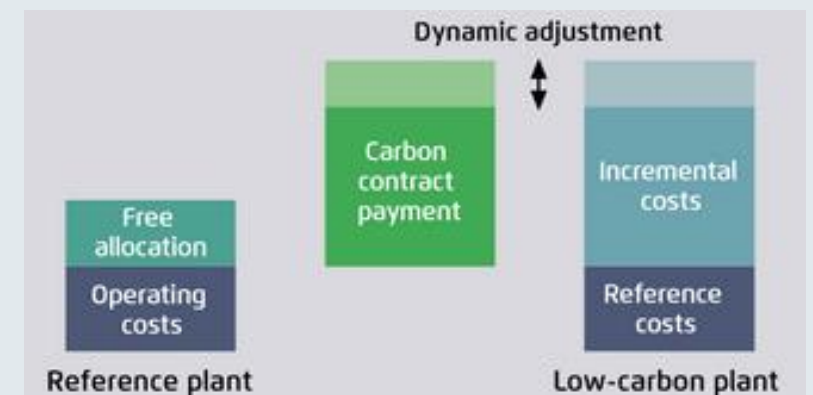


HOW TO DECIDE WHICH PRODUCTS QUALIFY FOR A GREEN LEAD MARKET, AND WHAT LEVEL OF SUPPORT THEY RECEIVE?

- › Are “substantial” emission reductions sufficient, and which emission reduction qualifies as “substantial”, or do emissions need to come all the way to net zero? How to account for inputs (H₂, electricity), what ambition by when?
- › Need for clear and dynamic standards – different examples exist at different levels:
 - › Low-Emission Steel Standards developed by the German Steel Industry,
 - › WEF First-Movers-Coalition proposal for low-carbon cement and concrete,
 - › IEA/G7 proposal for low-emission and near-zero emission standards for steel and cement,
 - › EPBD harmonized calculation methods for embedded carbon in buildings – but national standards.

HOW DO LEAD MARKETS RELATE TO EXISTING INSTRUMENTS OF EU CLIMATE, ENERGY AND INDUSTRIAL POLICY? ARE THERE CONFLICTS AND OVERLAPS?

- › No silver bullets (obviously): Green Lead Markets are part of a broader policy mix – but can fill an important gap.
 - › Most industrial / innovation policy is geared at **supply-side push** to lower the cost of clean technologies: research, innovation and investment support, CCfD, but also infrastructure, financing, permitting etc.
 - › Green Lead Markets complement these with **demand-side pull**. Main demand-side instrument in the EU, the EU ETS (+ CBAM) may be the demand-side solution in the long-run – but is not able to create sufficient demand in the short run.
- › **Standards and norms** need adjustment to accommodate novel materials, e.g. norms for construction materials: define which qualities products and materials have to meet, revising these (moving from prescriptive to performance-based) takes time.
- › With tech / investment support government assumes some of the risks, contributes to capex (less often opex) to offset additional costs of lower-carbon production. If output is then sold on a green lead market – **who gets to keep the green premium?**



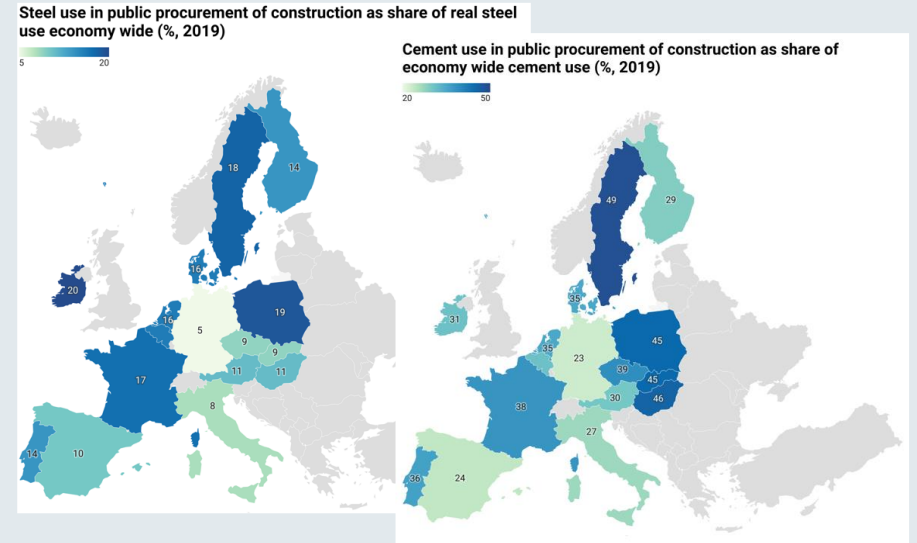
Source: Agora Industry, FutureCamp, Wuppertal Institute and Ecologic Institute 2022

Between Climate action and competitiveness: Lead markets as a tool of EU Green industrial policy

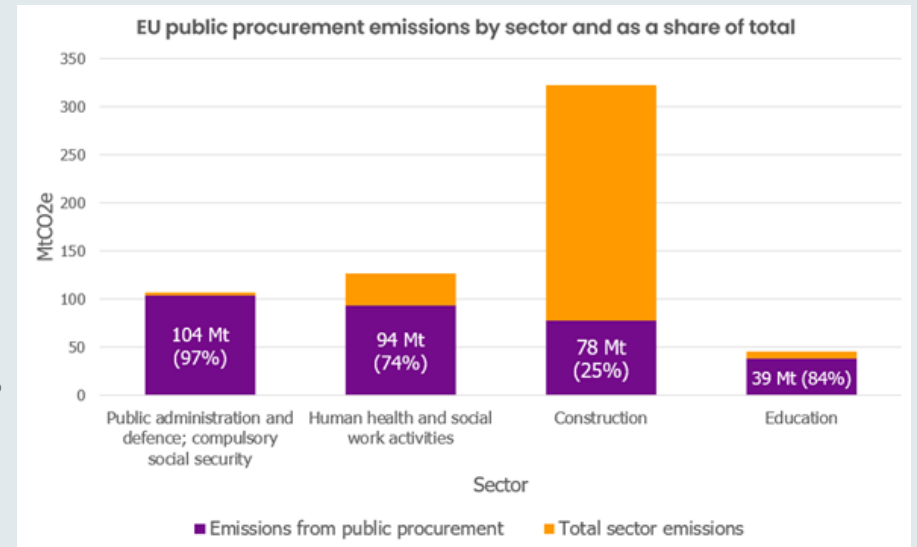
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CAN PUBLIC PROCUREMENT KICK-START LEAD MARKETS? HOW ELSE TO STIMULATE DEMAND?

- › Public procurement esp. relevant for cement and steel: accounts for 31% of cement (5.1 bn €) and 11% of steel market (8.2 bn €) ([Wyns et al. 2024](#))
- › Demand will remain high: public **investment gap**, investment for energy transition, decarbonization, adaptation (infrastructure, public buildings).
- › Potential for **strategic use** of PP: from green public procurement to public procurement for climate neutrality ([Mähönen et al. 2024](#))
- › Downside: **limited budgetary space** anywhere, competing spending needs.
- › Private demand: esp. for buildings, **cost of housing** as a pressing issue
- › Other sources of demand: voluntary WTP from private households; private pledges from corporate buyers (driven by net-zero goals); mandatory quotas for low-carbon products (think SAF); fiscal incentives.



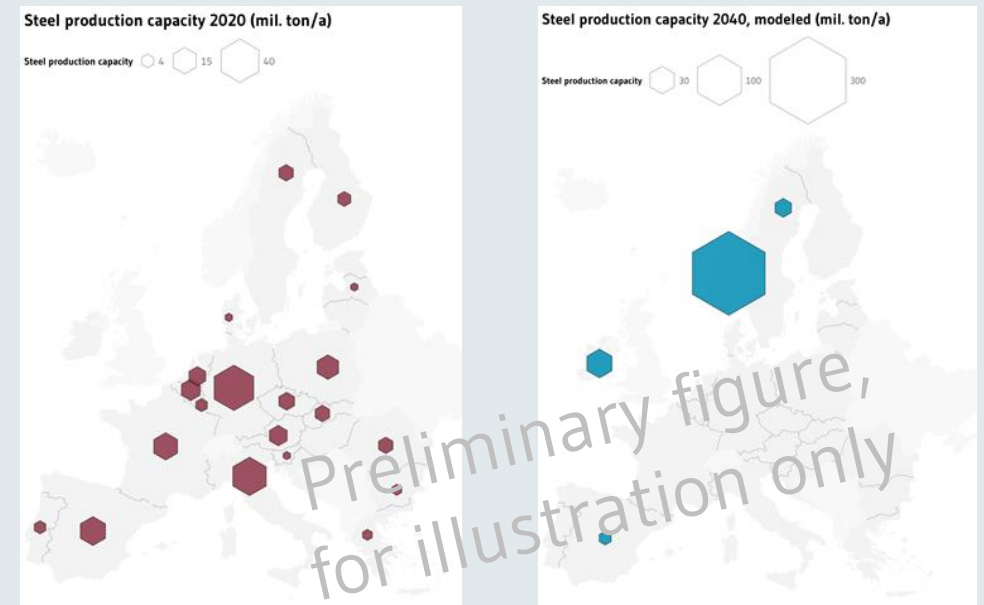
Source: [Wyns et al. 2024](#)



Source: [Mähönen et al. 2024](#)

(HOW) CAN WE ENSURE THAT EXISTING INITIATIVES FOR GREEN LEAD MARKET AT MEMBER STATE LEVEL ARE INTEGRATED INTO A COMMON EU SOLUTION, AND HOW CAN WE AVOID A PATCHWORK OF NATIONAL SOLUTIONS?

- › Obvious case for EU-wide Green Lead Markets (single market, state aid issues)
 - › (even more of a no-brainer: common standards for which products qualify for GLM)
- › Initiatives in some MS - risk of **market fragmentation**, diverging standards
 - › Possible to start national, then aggregate to a common system?
- › Would not require more *EU* budget, but imply additional bureaucracy
- › Question: is there political support for an EU-wide mechanism if the **payoff for protecting national industries** / locations is uncertain?



RESPONSES FROM DISCUSSANTS

Philipp Tschinke, Salzgitter AG

Karl Thies, CEMEX Cement

Suzana Carp, Cleantech for Europe

Marzena Rogalska, DG CLIMA