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Clean Steel and Transport: EU moves green!

Clean Steel goals and added value

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Steel is central to the economy and its future must be green

How to get there is complex and challenging

Green steel will have a significant impact on transport and the EU economy in general

The European steel industry have developed:

- a technology roadmap
- a policy framework

It underpins the development and decarbonisation of major manufacturing sectors right along the value chain.

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The challenges to steel's transition are fundamental.

We need:

- to undertake a regulatory framework
- to develop the specific tech and manage their deployment
- to invest in new lines and processes

We must

- be able to market and sell our green steels
- manage this during a peak of international competition

With supportive conditions in place the European steel industry will be able to commit to delivering on the EU's climate objectives and sustainable growth targets.

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Under the right conditions, the steel sector will be able to reduce CO₂ emissions by 30% by 2030 compared to 2018 emissions

This is about 55% compared to 1990 – our ambition is shared by the EU.

By 2050 we could get down to 80 to 95 per cent reductions, while contributing to greenhouse gas mitigation across all sectors.

Breakthrough technologies have emerged and now need to be tested and implemented on an industrial scale between now and 2030, and beyond.

Our pathways for these technologies can be broken down to include:

- Carbon Direct Avoidance, which concerns the use of hydrogen- and electricity-based metallurgy.
- Smart Carbon Usage: which involves process integration and Carbon Valorisation – also known as Carbon Capture and Use.

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These new clean steel technology pathways will result €20 billion/year costs compared to the retrofitting of existing plants costs for the EU steel industry.

Public financial support for Research, Development & Innovation remains crucial.

The clean and green steel transition will affect consumer prices: by 2050, the price of steel will be 35-100 per cent higher per tonne than it is today

The creation of markets for green steel is just as important.

Steel users must be encouraged to use green steel – and consumers must be empowered to know that the product they are buying is made of more environmentally friendly material.

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A single sector cannot solve this problem alone.

We need a more coherent approach along the value-chain which incentivise the decarbonisation of our economy.

Short-term regulatory measures are necessary to stimulate the development of lead markets for low carbon 'green' products.

An incentive scheme could be developed via the connection between basic materials and automotive manufacturers, via the inclusion of green steel in eco-innovations for cars, for instance.

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The unique properties of steel are evident: a high strength to weight ratio allows lightweight structures to be made and offers design flexibility, ease of assembly, strength, safety and durability, and never ending recyclability.

All these properties will be available in green steel, but since the emissions in the use phase will fall in future, the manufacturing and end-of-life impacts will become increasingly important in the transport sector.

By 2050 more than 50 per cent of the lifecycle emissions in a vehicle will come from the materials and end of life impacts. The same could apply to other transport modes.

This is why it is important to incentivize the use of green steel. This is why we call for greater use of lifecycle emissions reporting in transport policy.

Broadening the scope of eco-innovation credits in vehicle CO2 regulations could achieve this.

Presently, the implementing act limits these 'eco-innovation' credits to the 'efficient operation' of the vehicle – this should be extended to include 'green materials' as well.

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Green steel enhances the potential for the use of green fuels for transport.

Carbon Capture Utilization processes being implemented by steelmakers can be used to produce low-carbon alternative fuels.

Hydrogen also represents a potential revolution in steel making. The steel industry will create demand for regional and cross-regional hydrogen infrastructure that will have many uses, including in powering transport solutions

Implementing these parts of the European steel sector's green steel program is essential to meet the EU's climate targets – and doing so will secure the industrial leadership of Europe's entire industrial base.

We, as leaders of the steel sector are determined to act rapidly and in a very determined way to reach the objectives that will make clean and green steel available in the shortest time.

But we must operate in a clear and favourable context to make all this happen. This is the challenge we must succeed and win !

THANK YOU !

