Systems Change Lab
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Nudging and Campaigning
For the Transformations at Greatest Risk

Monitoring
The Required Transformations

Learning and Sharing
About the Ingredients for Change
• Develop new solutions for zero carbon steel, cement & plastics

Outcomes
• Benchmark:
  • Indicator: Carbon intensity per ton of steel

Factors enabling or preventing change
• Innovation:
  • Indicator: Cost of producing green hydrogen
  • Indicator: Announced low carbon steel projects
Sample data
Industry shifts:

1. Reduce demand for steel, cement, and plastics
2. Improve industrial energy efficiency
3. Electrify industry
4. Develop new solutions for zero-carbon steel, cement and plastics

Topline indicators (Steel only):

• Carbon intensity per ton of steel (kgCO2/t)
• CO2 emissions from steel production (MtCO2)
• Production of near-zero-emission steel (Mt or % share) (no data)
• Apparent steel use per country (Mt)
Driver indicators: Factors of change (steel only)

Some examples:

- Global R&D spending for steel (corporate & public, by country) (no data)
- Cost of producing decarbonized steel (USD) (no data)
- Share of secondary steel (produced using scrap steel) in total steel production (%) (no data)
- Number of low-carbon steel projects planned to become operational (limited data)
- Percentage of global steel manufactured under a supporting policy for green production (%) (no data)
- Share of global steel production covered by national net-zero roadmaps (%) (no data)
- Number of demonstrations/pilots/patents for commercial technology to electrify high-temperature heat in industry (no data)
https://systemschangelab.org/

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