



CEPS **Technical workshop on sectoral approaches: Benchmarking, sector boundary and monitoring, reporting & verification issues**

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On behalf of:

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Chairman IISI DCTF & Chairman EUROFER Benchmarking WG

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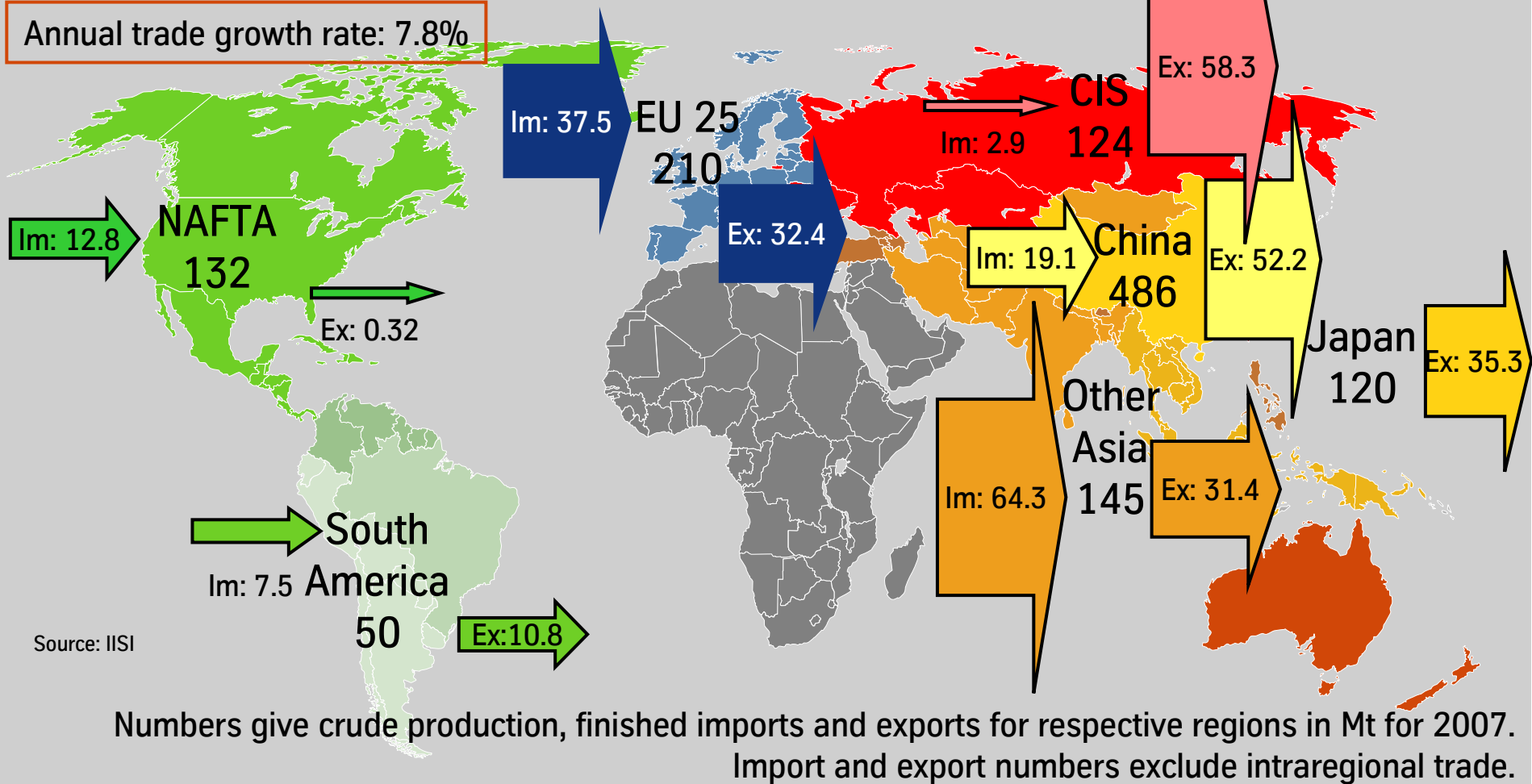


Content

- Situation of European Steel Industry – amongst global partners
- What can we take from GSA for the European discussion?
- Way forward for European Steel Industry



EU Steel Industry is global – effective measures must be global too! Only a robust Int. Agreement creates a level playing field



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What can we take from GSA for the European discussion?

- Very important **assessment** where we stand today globally (biggest CO₂ data collection underway)
 - Specific emissions ($t_{\text{CO}_2}/t_{\text{Steel}}$) without any consideration of production volumes
 - Main focus: identification of reduction potentials as basis for technological exchange and improvements
- Key **platform** for discussion, exchange and trust building
 - => investment in International Agreement
 - Supported by other IISI exchange platforms such as CO₂ Breakthrough Programme, or IISI LCI activities
- Practically all European steel producers and associations are members of IISI
- ... but important differences to be considered



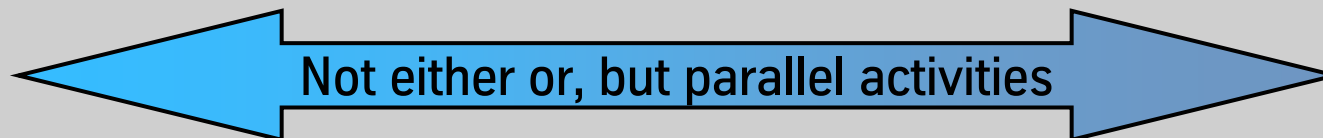
Differences between IISI GSA and EUROFER Benchmark

IISI Approach

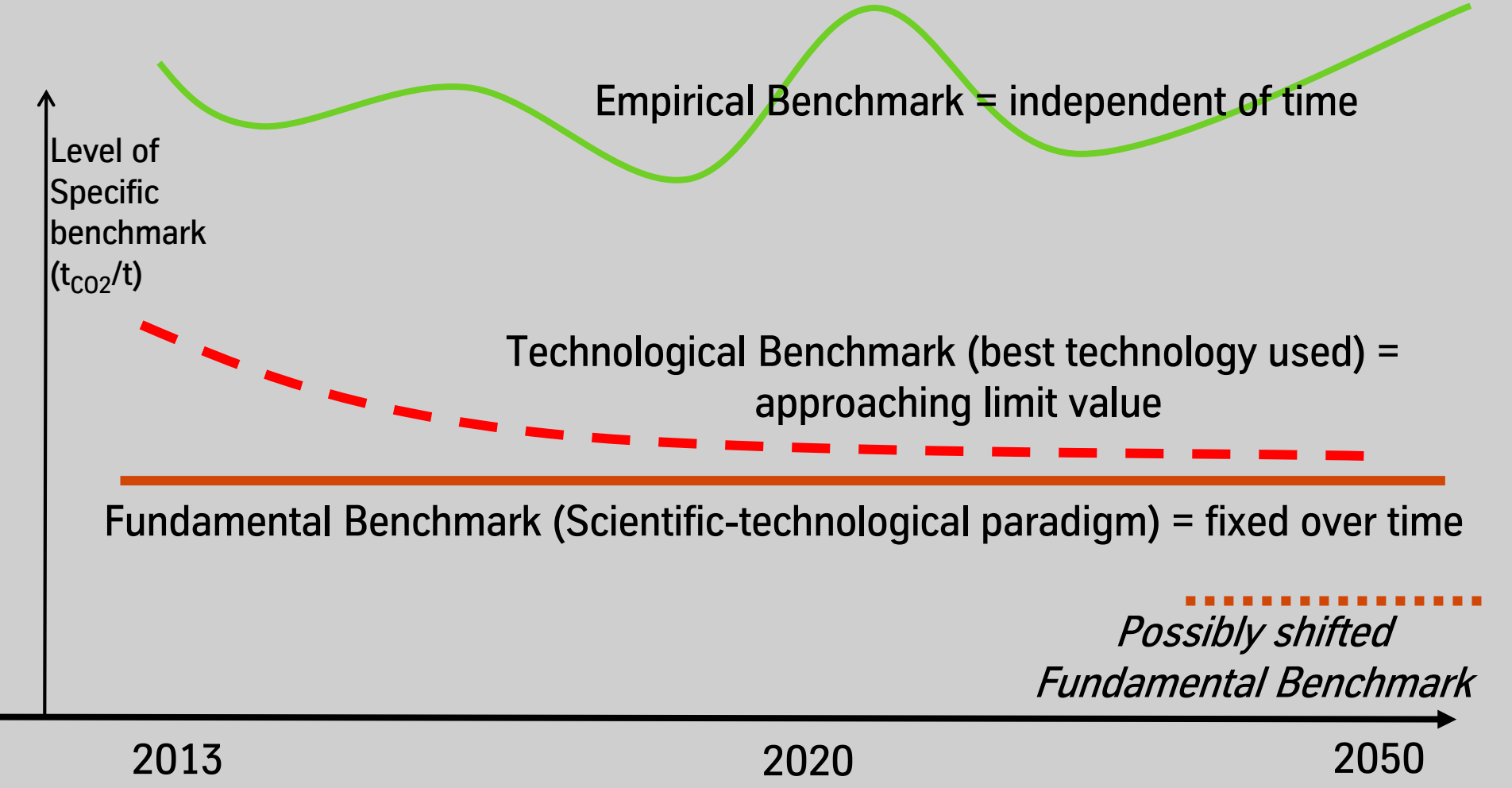
- Long-term (2050) & transition
- includes indirect emissions to compare actual impact
- Only one figure of specific value since upstream level out differences
- Covers very different regional settings
- Aim: specific CO₂ benchmark as basis for industry assessment

EUROFER Approach

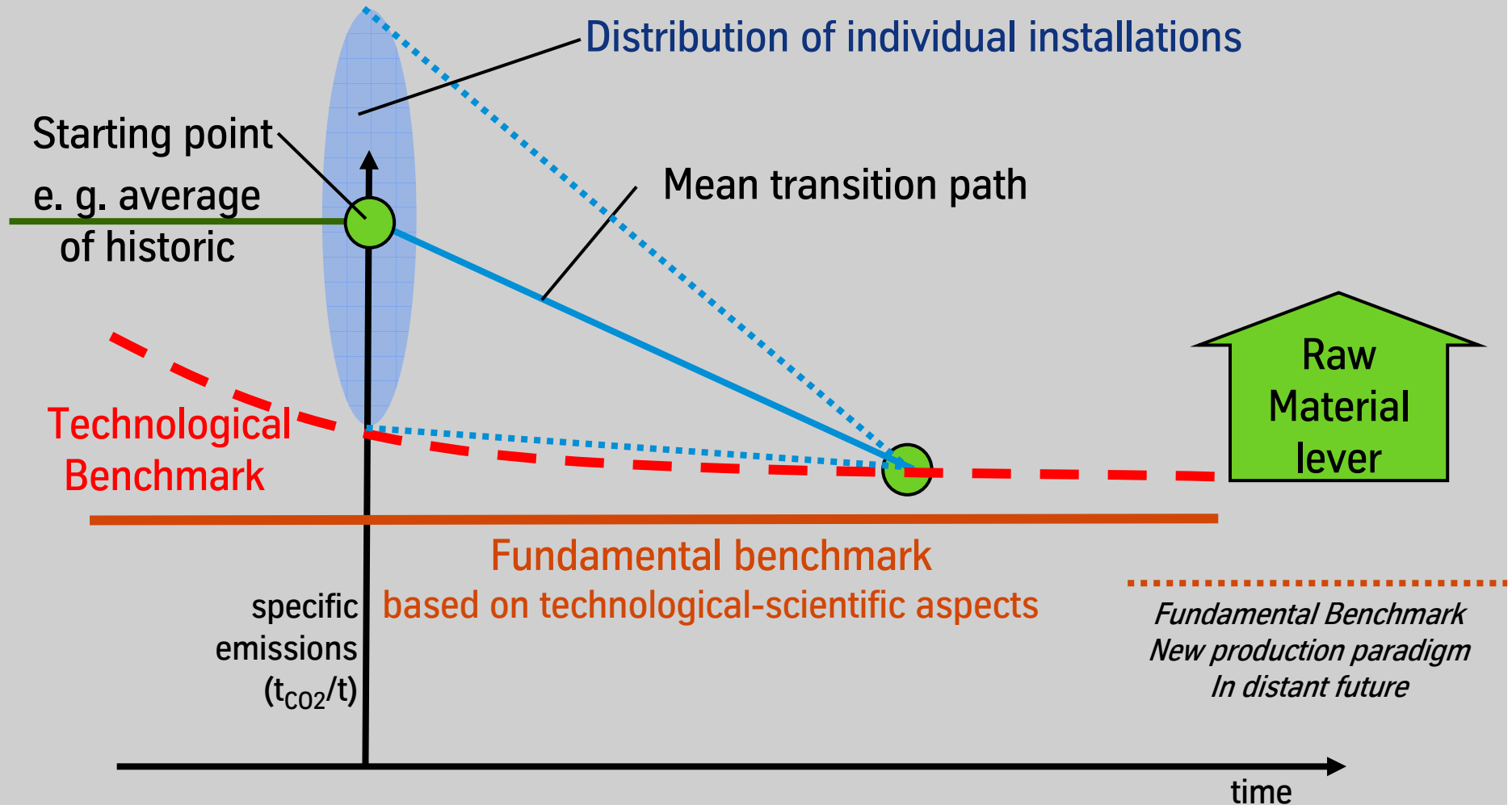
- ETS phase 3 driven (2013)
- focusses on direct emissions as it needs to work with cap-and-trade
- Needs to include intermediate products to incorporate trade and different installation configurations
- Geographically specific
- Aim: absolute CO₂ for EU ETS allocation based on benchmark



Different Benchmark Concepts and time dependencies – what are we actually talking about?



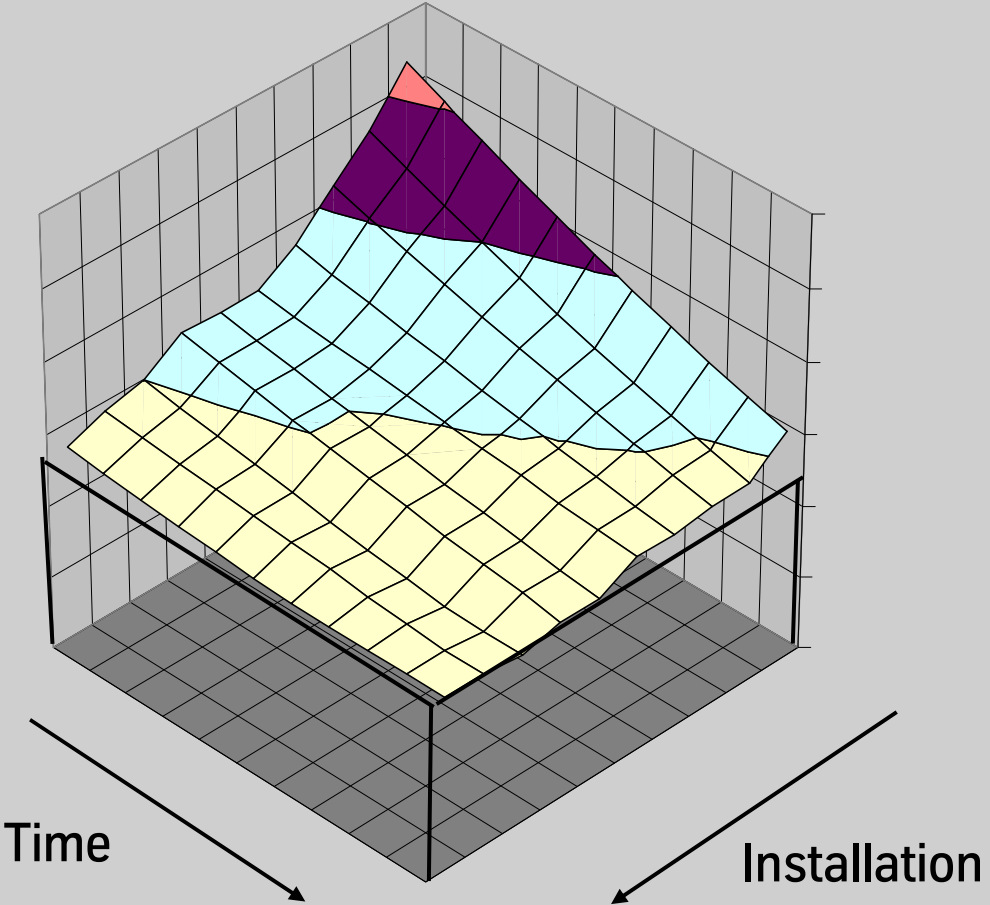
General Elements of a benchmark approach - schematic



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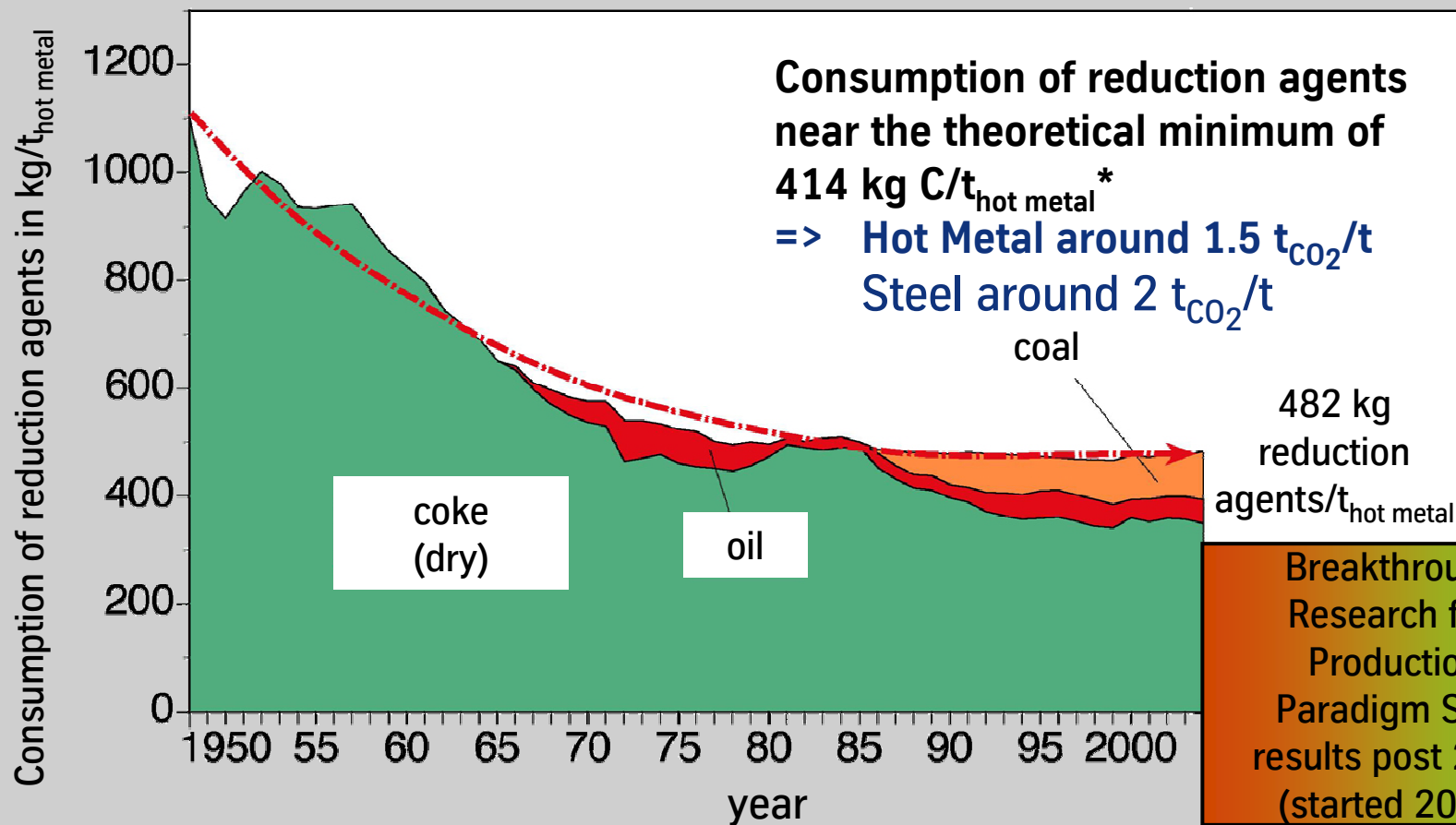
Asymptotic Development of Industry towards Benchmark



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Reduction Agents' Consumptions already reduced to minimum – no way to go further on this route



Source: VDEh, Blast Furnace Committee

*414 kg C/t_{hot metal} according to 465 kg coke/t_{hot metal}

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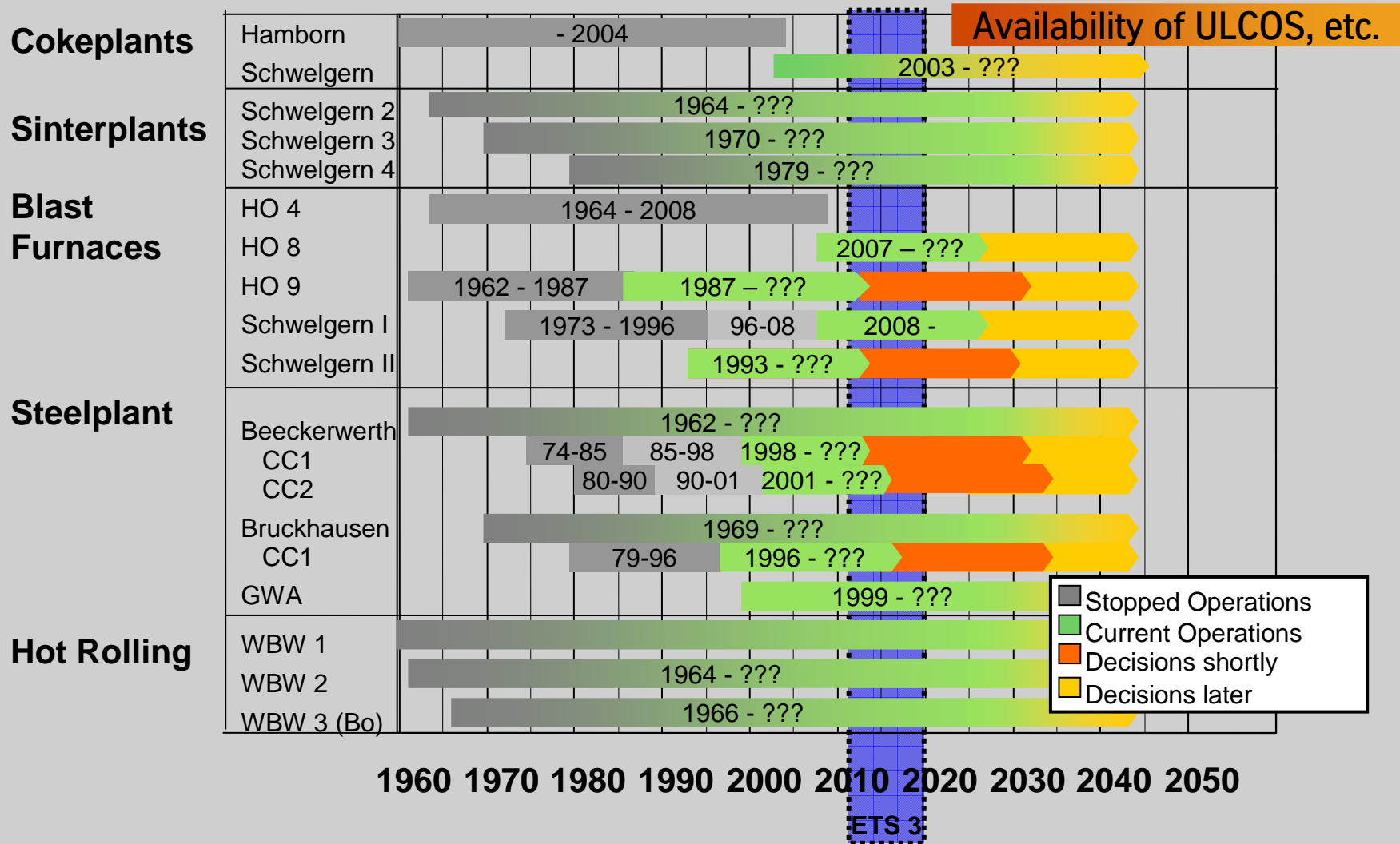
EU-Research Programme “Ultra Low CO₂ Steelmaking” to chart new routes for steelmaking – breakthrough technologies



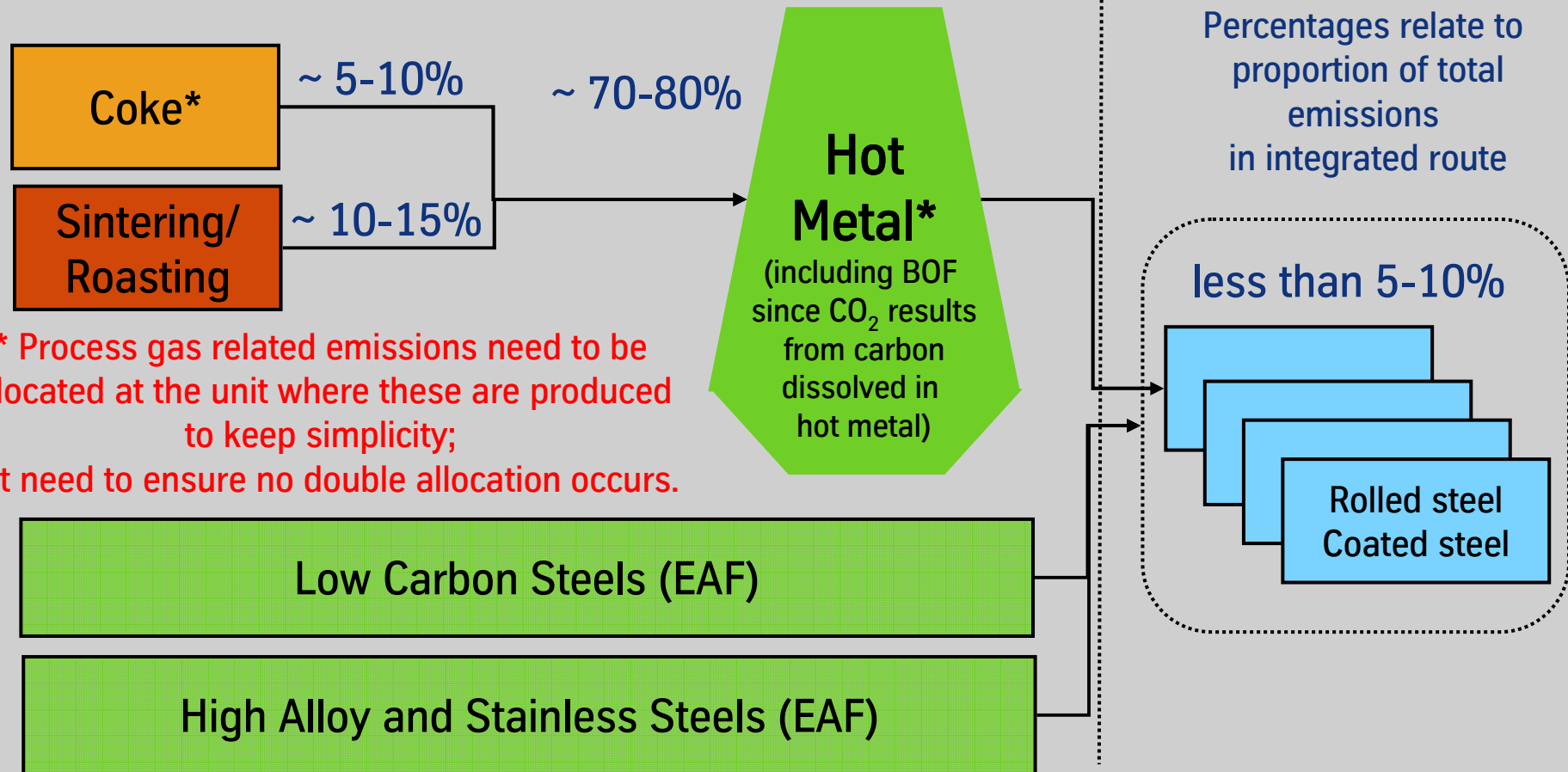
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Timeframe of Operations much longer than ETS phases



Set of few product benchmarks required to cover complex industry of 200 Mt/a with internal trading and installations referring to segments in Annex 1



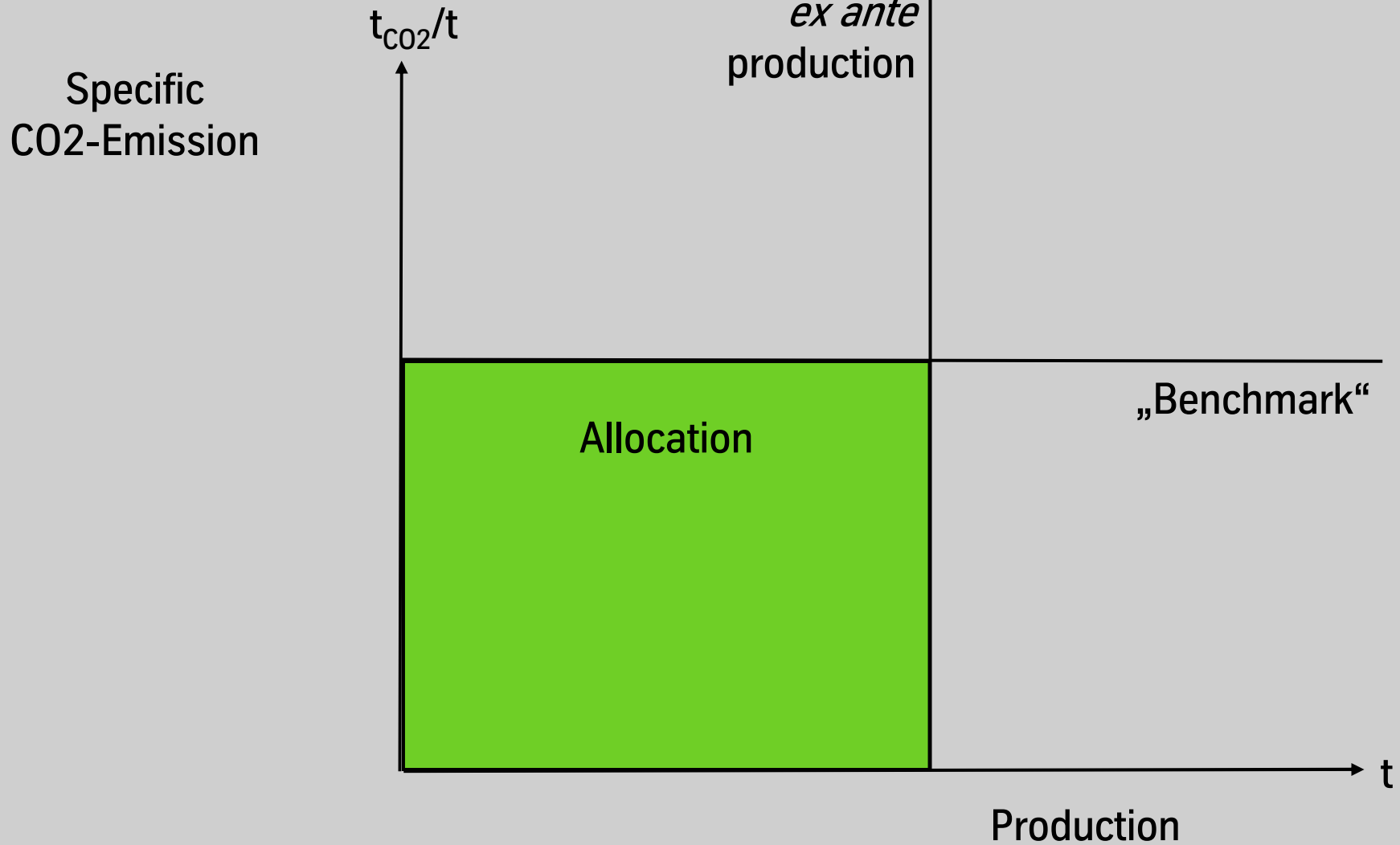
* Process gas related emissions need to be allocated at the unit where these are produced to keep simplicity; but need to ensure no double allocation occurs.

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Draft under Discussion at EUROFER



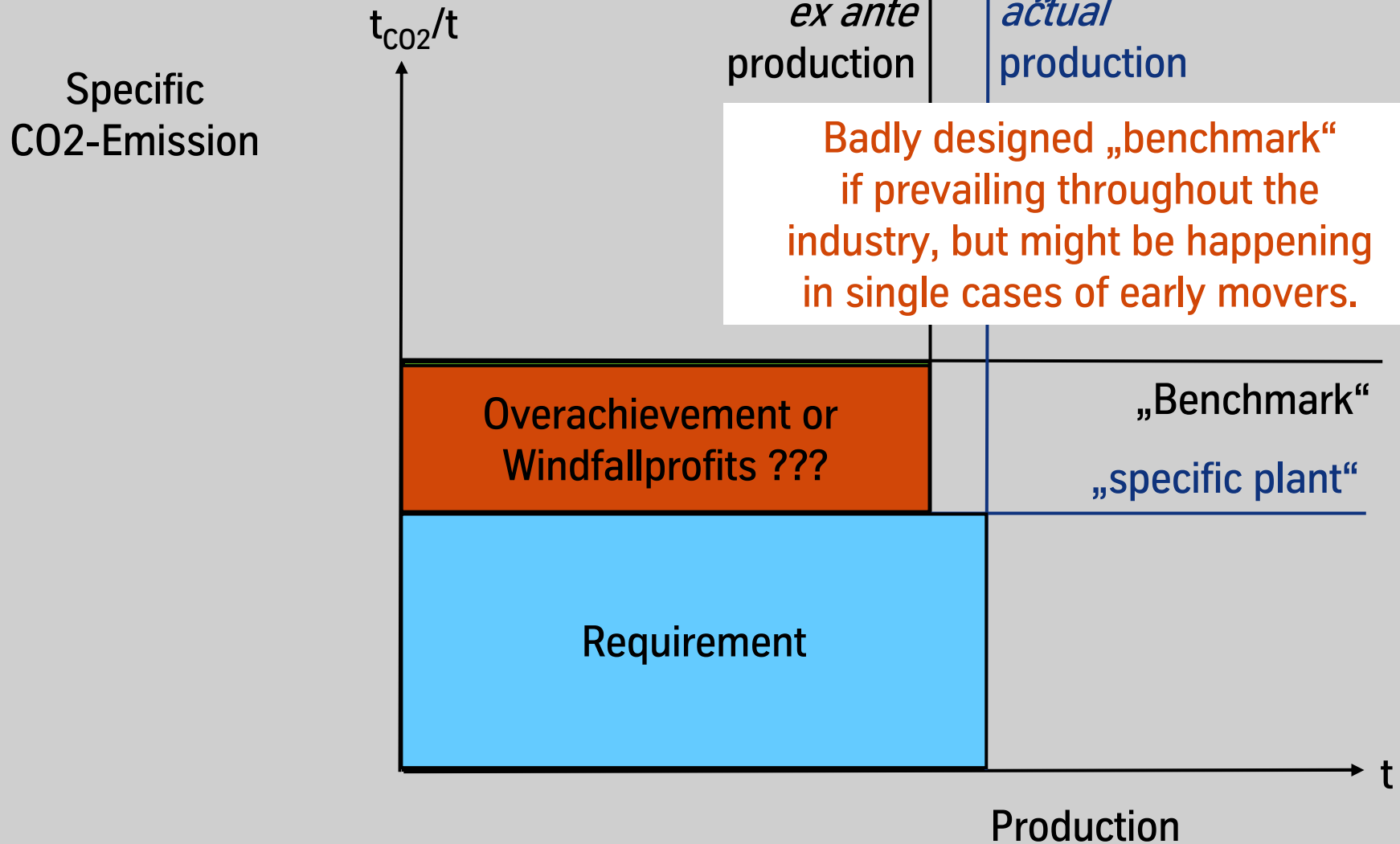
Benchmark and Allocation – Allocation ex ante



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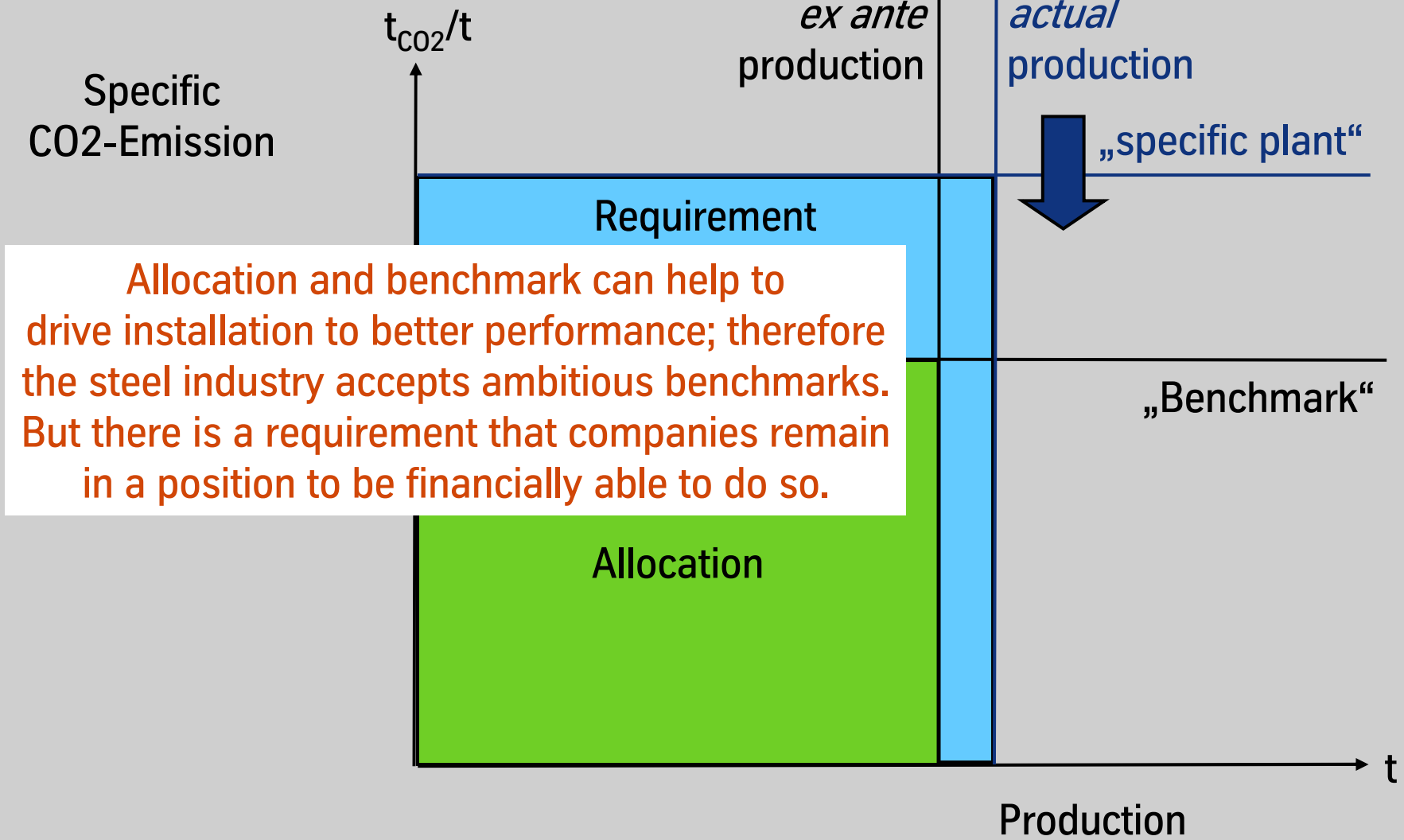
Benchmark and Allocation – emissions below „benchmark“



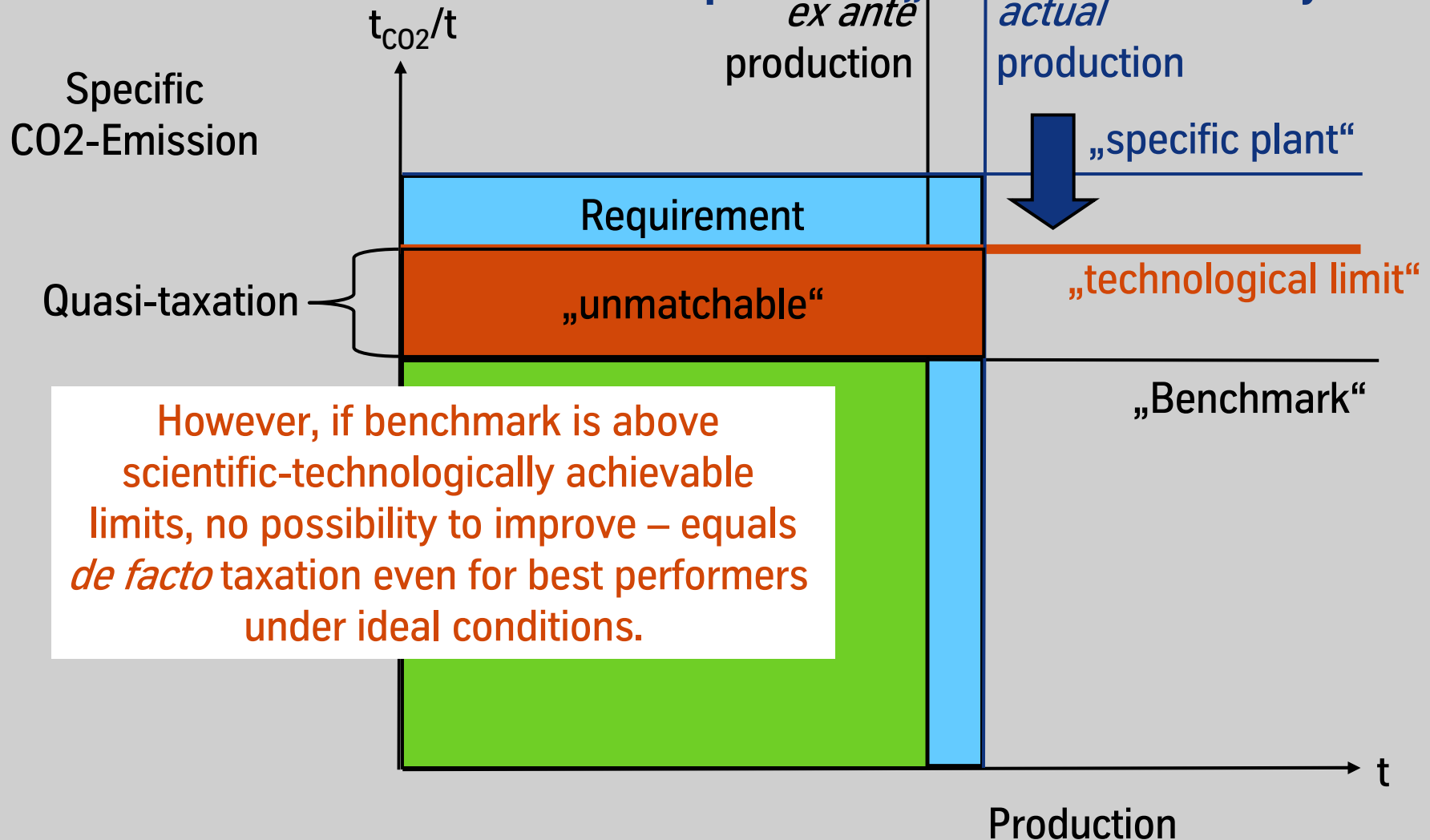
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Benchmark and Allocation – ambitious benchmarks as drivers



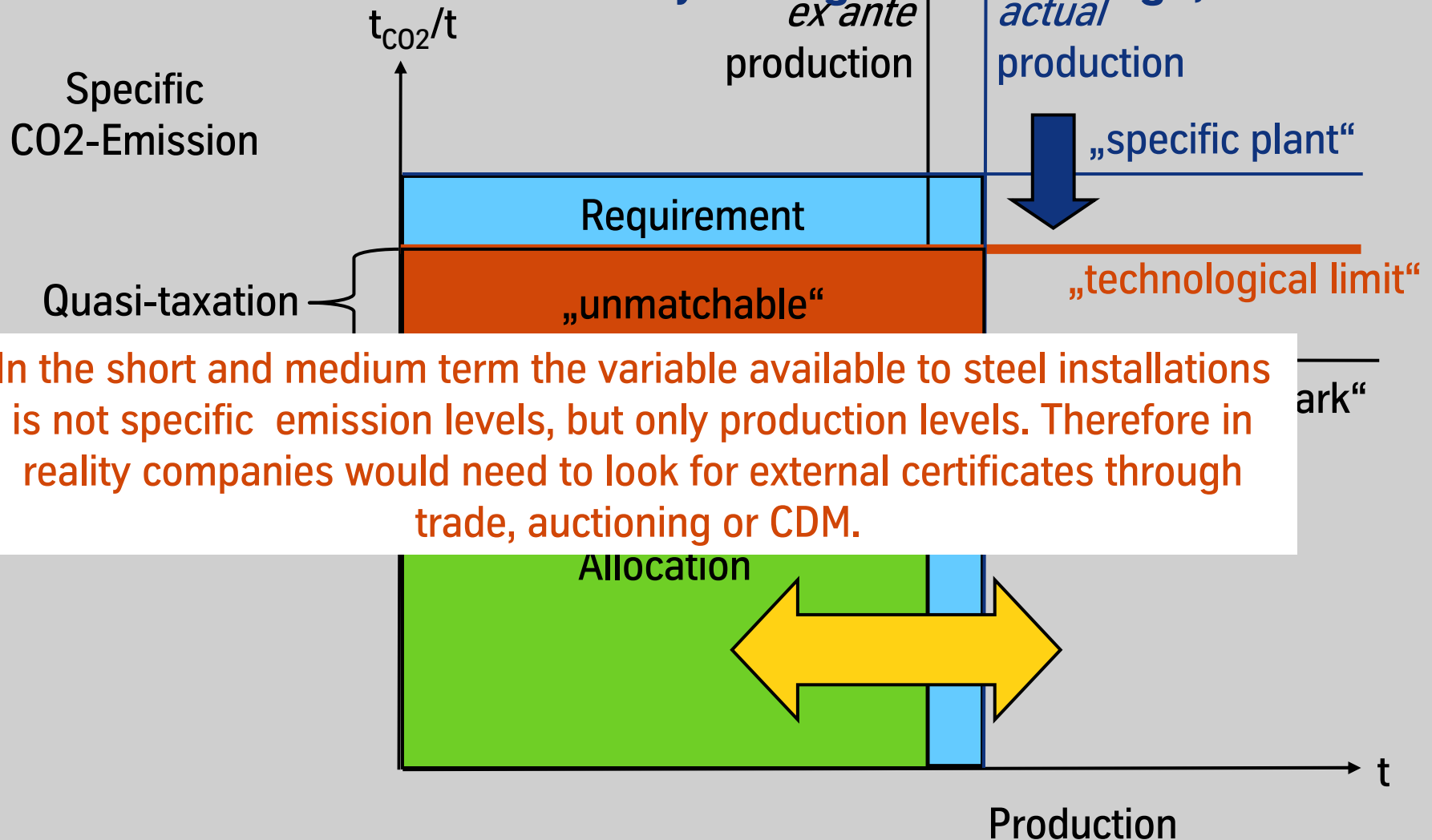
Benchmark and Allocation – impossible „benchmarks“ only cost



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Benchmark and Allocation – system generate change, but which?



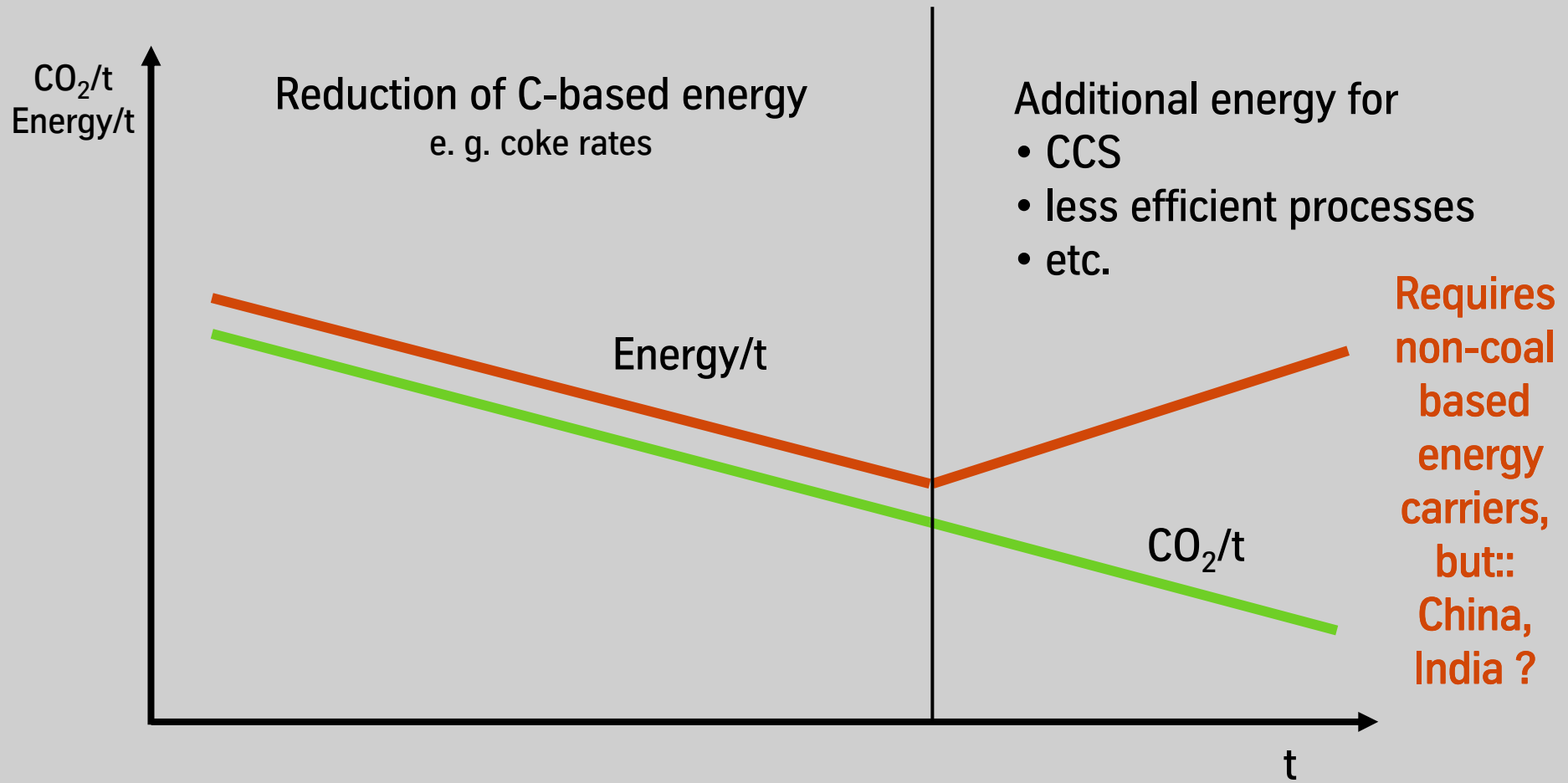
Benchmark and Allocation

$$\text{Allocation} = \text{Benchmark} * \text{Production} * \text{Factor}$$

- Production, but which?
 - Historic
 - Rolling average
 - Planned
- Factors for
 - transition allowances (>1)
 - would leave industry above benchmark more financial room for required investments for transition to benchmark rather than buying additional certificates which return no improvement
 - benchmark acceptance (=1)
 - after a transitional time acceptance by steel industry
 - reduction (<1)
 - would result in allocation below minimum requirement and therefore unavoidably oblige industry to buy certificates to maintain production or reduce production
- Consider: Danger of growth constraints!
- Avoid: Drive out rather than drive to improve!



Decoupling of Energy and CO₂ Benchmark expected



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**Many thanks for
your allocation
of time!**



Viaduc de Millau

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