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Electricity and the chain of custody

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1 TERRA

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4 Essity

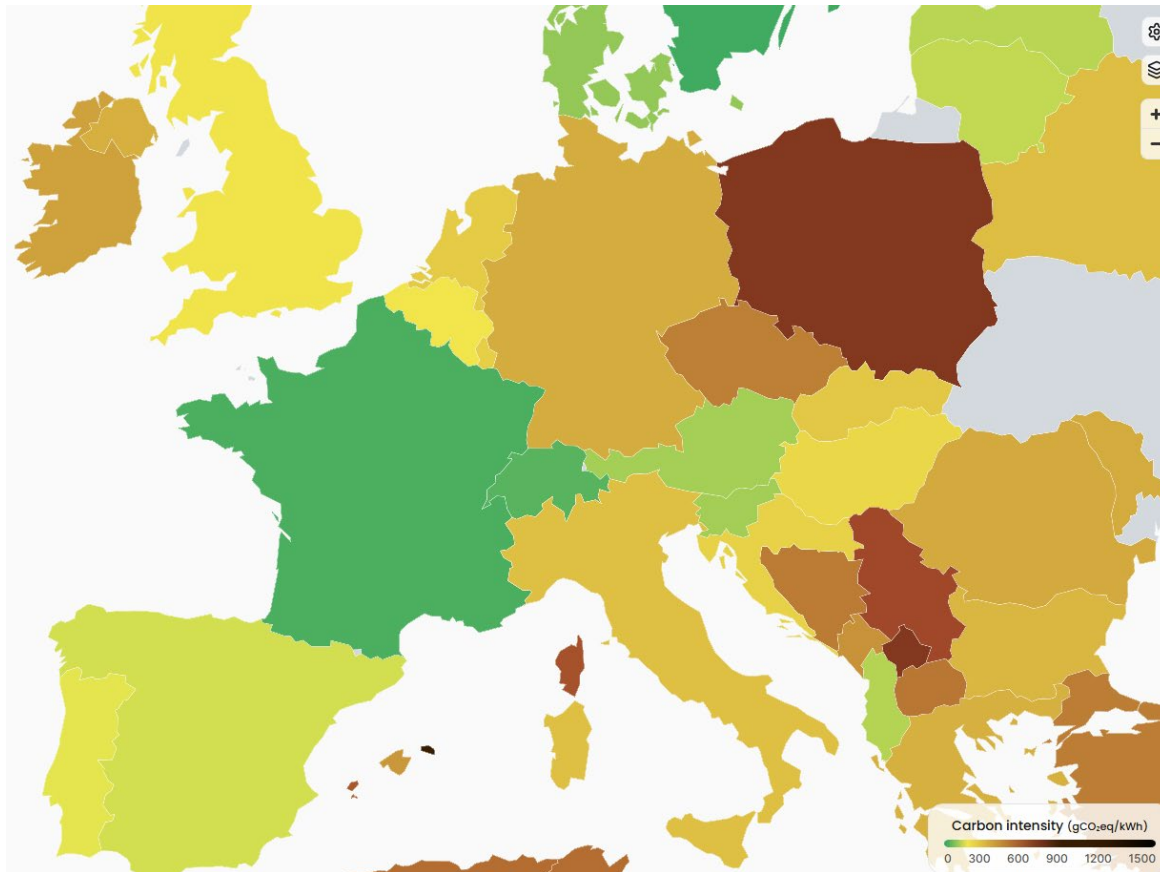
Agenda

- Electricity as CoC case
- Lessons from electricity debate
- The advantage of electricity modelling

Location-based electricity



LCM 2025

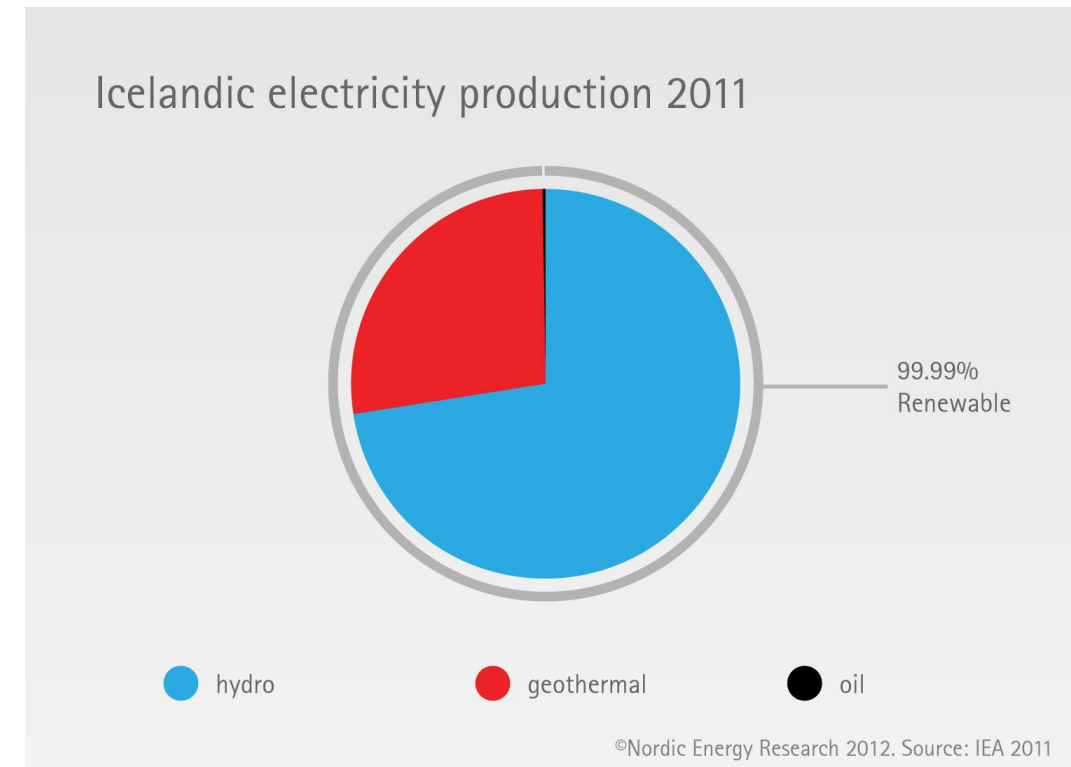


- Uses annual average electricity data
- Corresponds to rolling-average mass-balance approach
- Stipulated by
 - ISO 14064-1
 - GHG Protocol

Source: app.electricitymaps.com

Market-based electricity

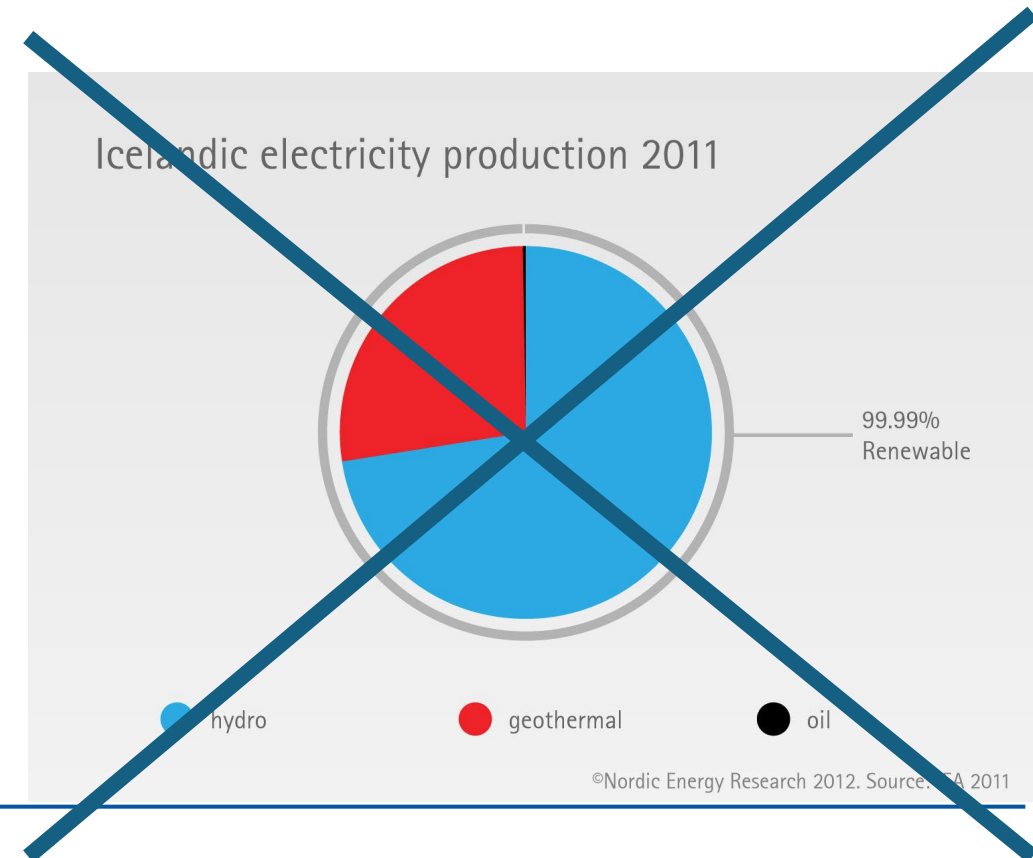
- Electricity and Guarantees of Origin are traded separately
- Corresponds to book-and-claim approach
- Stipulated by
 - ISO 14067
 - PEF
 - GHG Protocol



Source: Nordisk Energiforskning

Market-based electricity with constraint

- Electricity and Guarantees of Origin are traded separately
- Physical grid connection is required
- Corresponds to mass-balance with credits



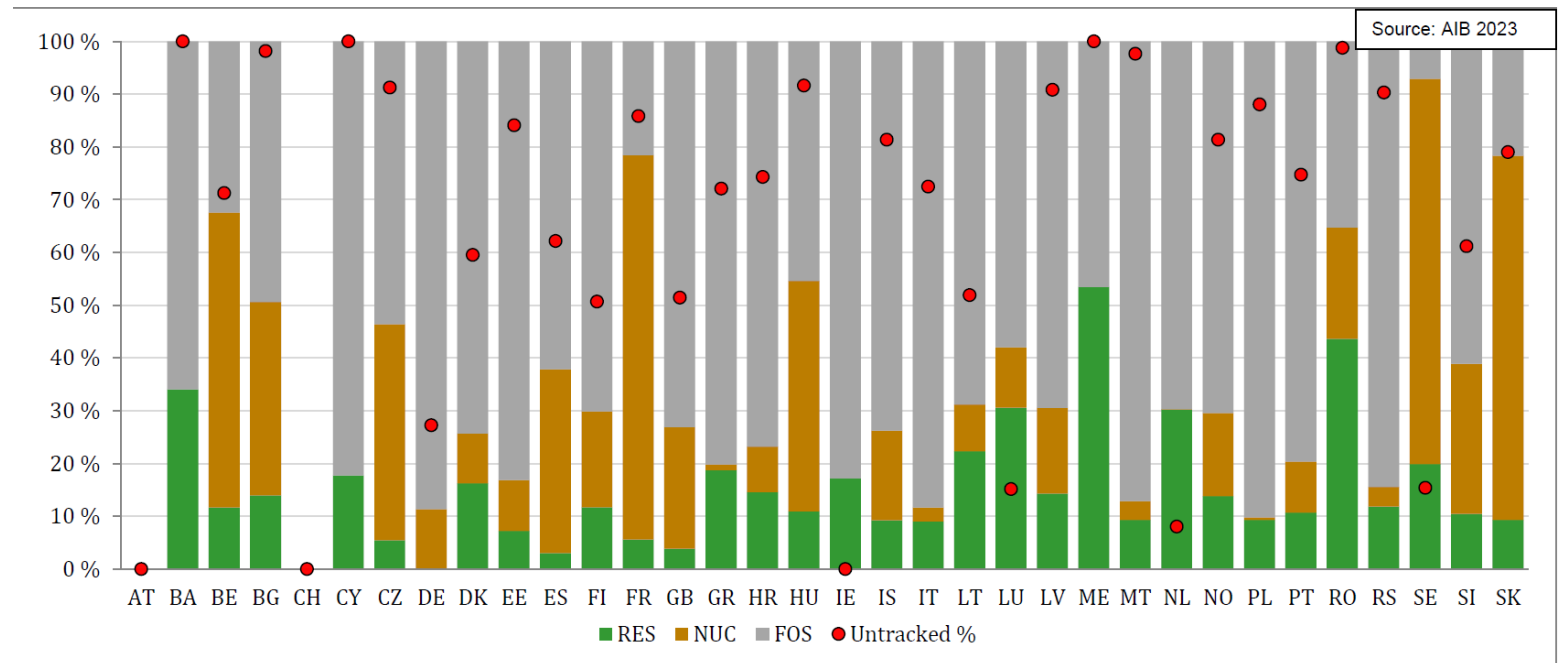
Source: Nordisk Energiforskning

Lessons from electricity debate

- Mass balance with rolling average is uncontroversial
- Book-and-claim
 - + gives incentives to green investments
 - can easily be construed as greenwashing

The advantage of electricity modelling

- Availability of residual data for book-and-claim



Source: Association of Issuing Bodies (AIB)

Consistent LCA standards

A Swedish Life Cycle Center project

Funded within Net Zero Industry, a joint initiative by Vinnova, Formas, and the Swedish Energy Agency

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