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Hybrid AI for industrial systems

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Technology for a better society



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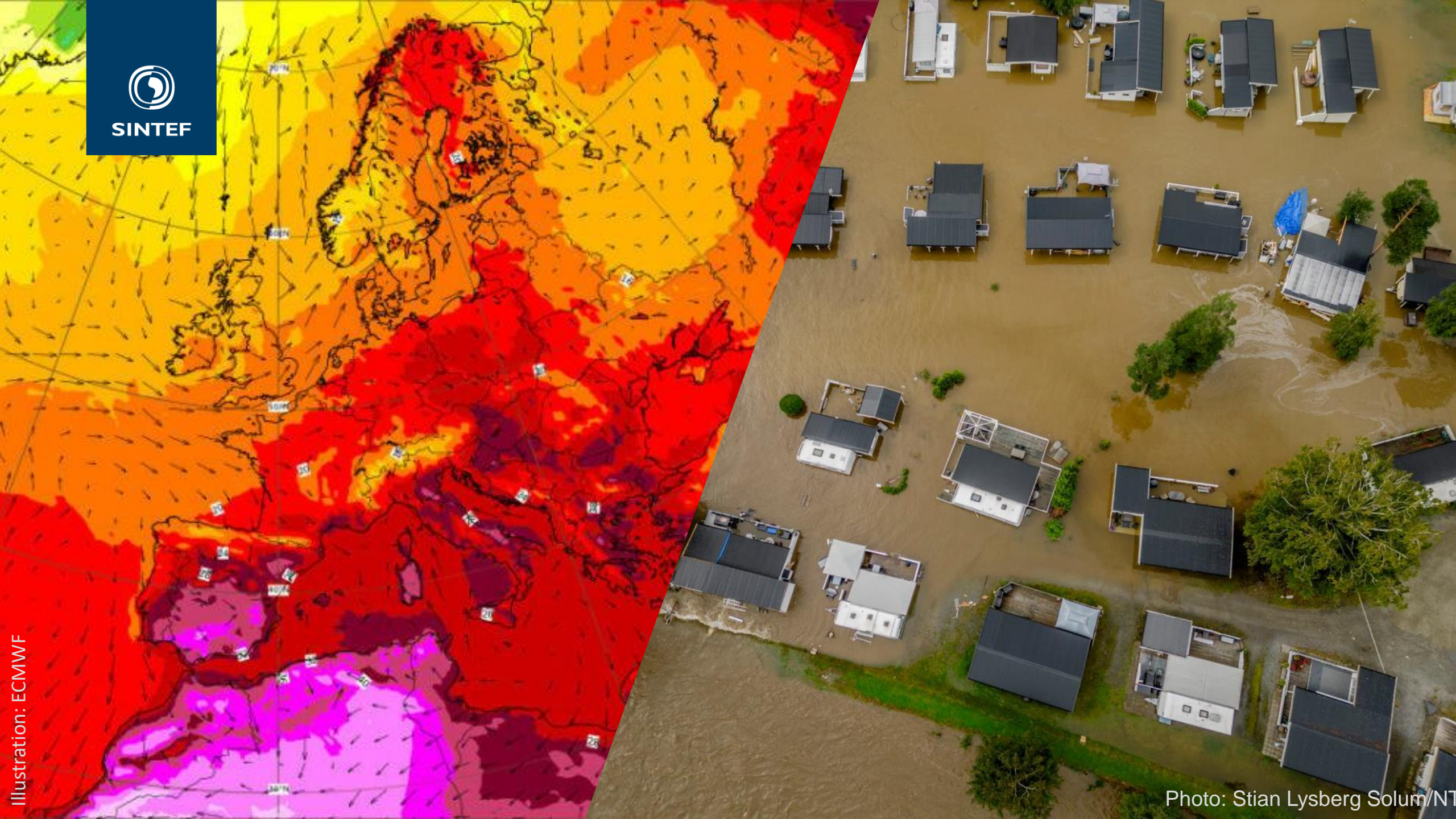


Illustration: ECMWF

Photo: Stian Lysberg Solum/NT



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Industrial reality is complicated

Complex systems

Limited standardization

Data challenges

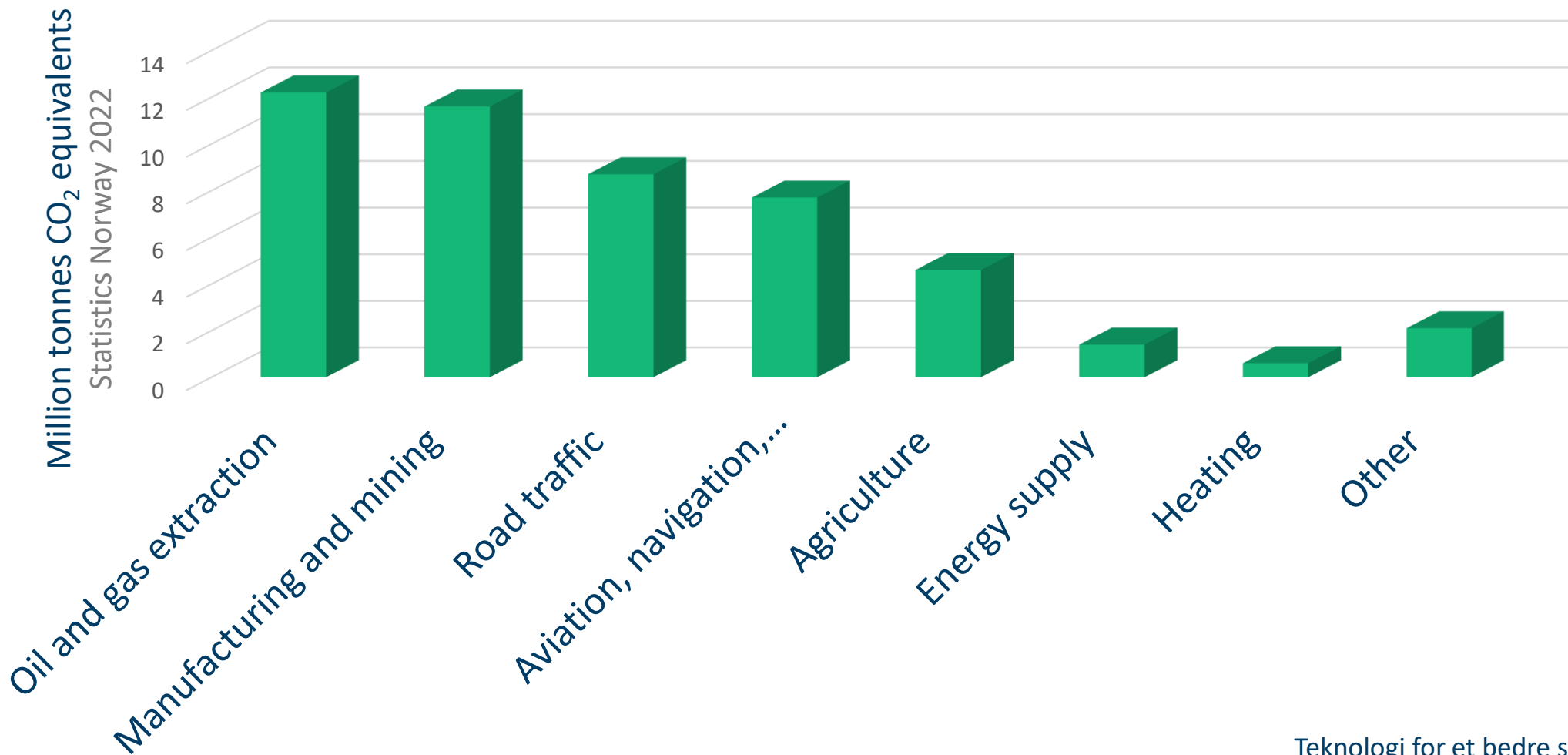
Safety critical systems





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Norway's emission





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Adjusting power production

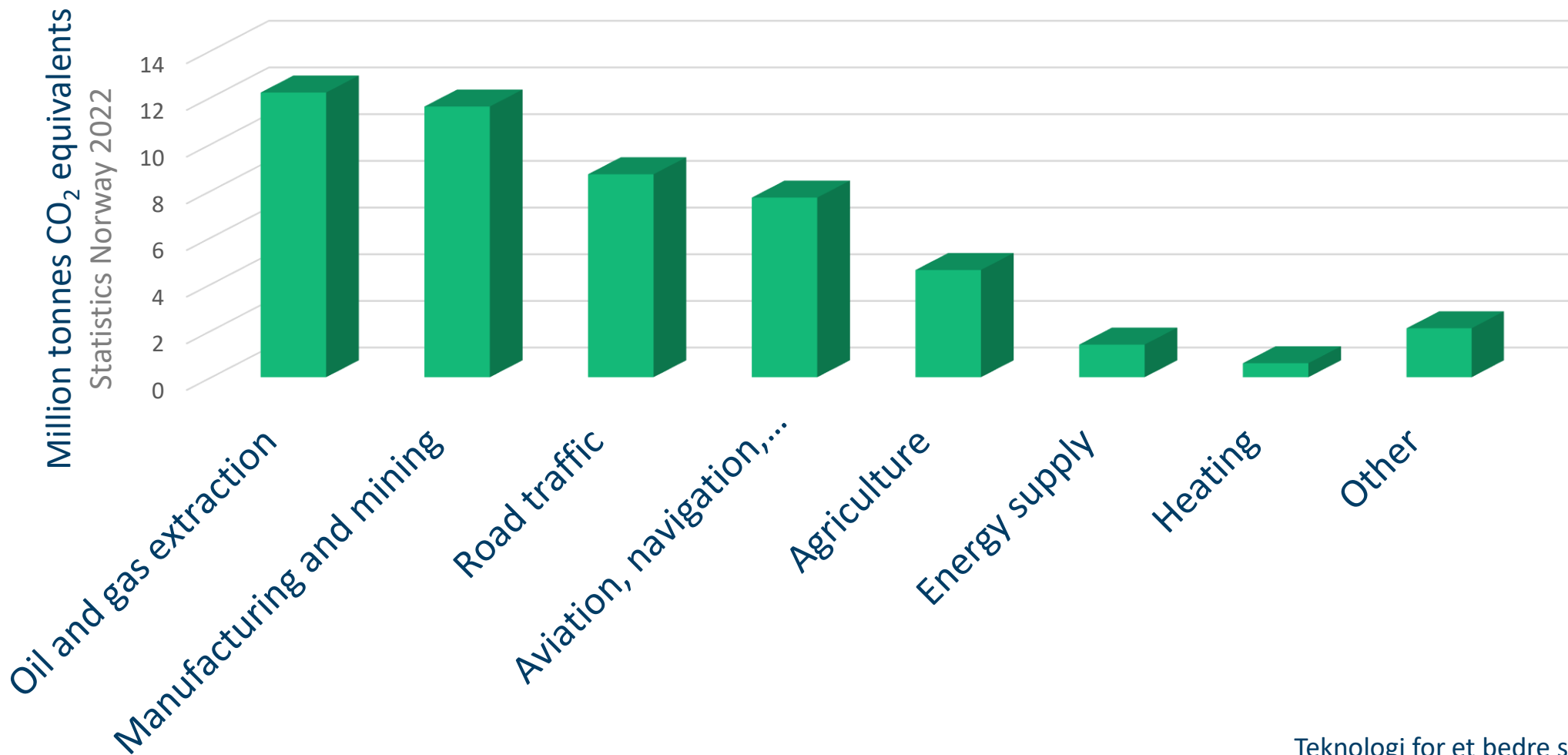
- Predict balance in electricity production
- Fluctuating renewable energy
- Better hourly production planning





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Norway's emission





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Use machines longer

Wear depends on weather (external) and usage (controlled)

Fast surrogate model

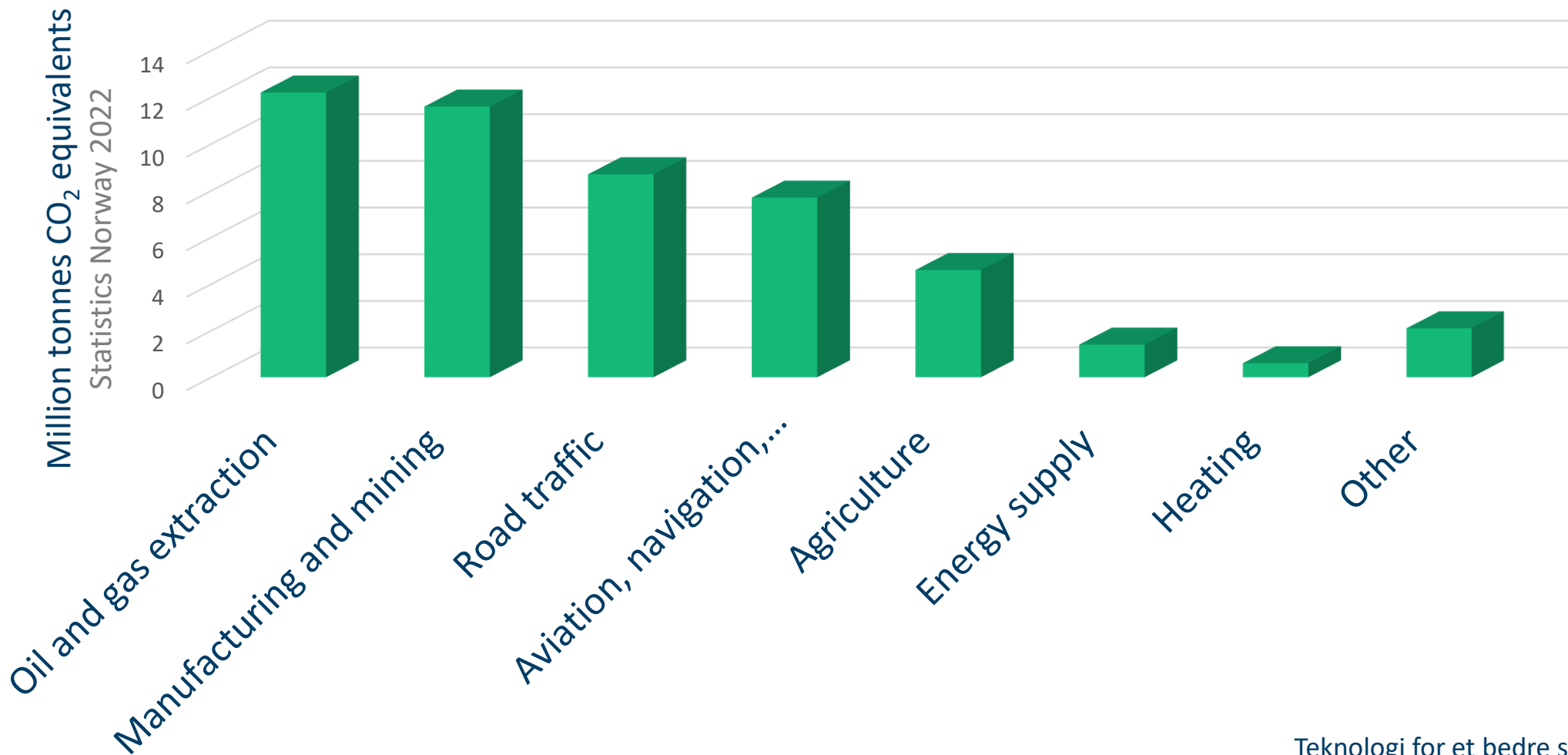
Enable optimal usage and maintenance





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Norway's emission



Stacking pallets for efficient transportation

- Reduce need for heavy manual labor
- Better algorithms or truckloads will increase
- Combine optimization, physics, and machine learning





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Hybrid AI for industrial systems

- AI for lower CO₂ emission
- Only possible with domain knowledge