

Find the most efficient path to net zero

AI driven scenario predictions for GHG reductions



Novatech NESSi™

Mission

Helping companies find their most efficient path to net zero

How

AI-driven scenario predictions & emission mitigation library

What

On-the-fly predictions delivered through our SaaS tool

Novatech AS

Founded on 19 May 2022

AI first company

Domain experts

Dedicated to reducing emissions



Our Team



Knut Husdal
CEO

20+ years of leading SaaS development
Delivered SaaS to oil & gas companies, global majors and authorities



Geir Husdal
Special Advisor

50+ years of experience in energy & emissions
Expert in emission mitigation in the oil & gas industry



Vasyil Keretsman
Lead Developer

20 years experience in enterprise software
Experienced cloud developer with enterprise SaaS background
Start March 2023



Lars Husdal
Senior Energy Advisor

PhD in physics, Energy specialist
CTO in an envirotech company
Experience from 2 international maritime companies
Start March 2023



Jane Felia
Marketing Strategist

International marketing strategy specialist
Experienced brand manager for an international company



Martin Hjelmeland
AI Scientist

PhD in Electric Power Engineering
Works as an **AI data scientist**
Expert in energy scheduling and distribution



The concept

Scenario Tuning

Switch Energy Carrier

- Ammonium
- Biodiesel
- Ethanol
- Hydrogen
- LNG
- Methanol
- Power from offshore wind
- Power from shore

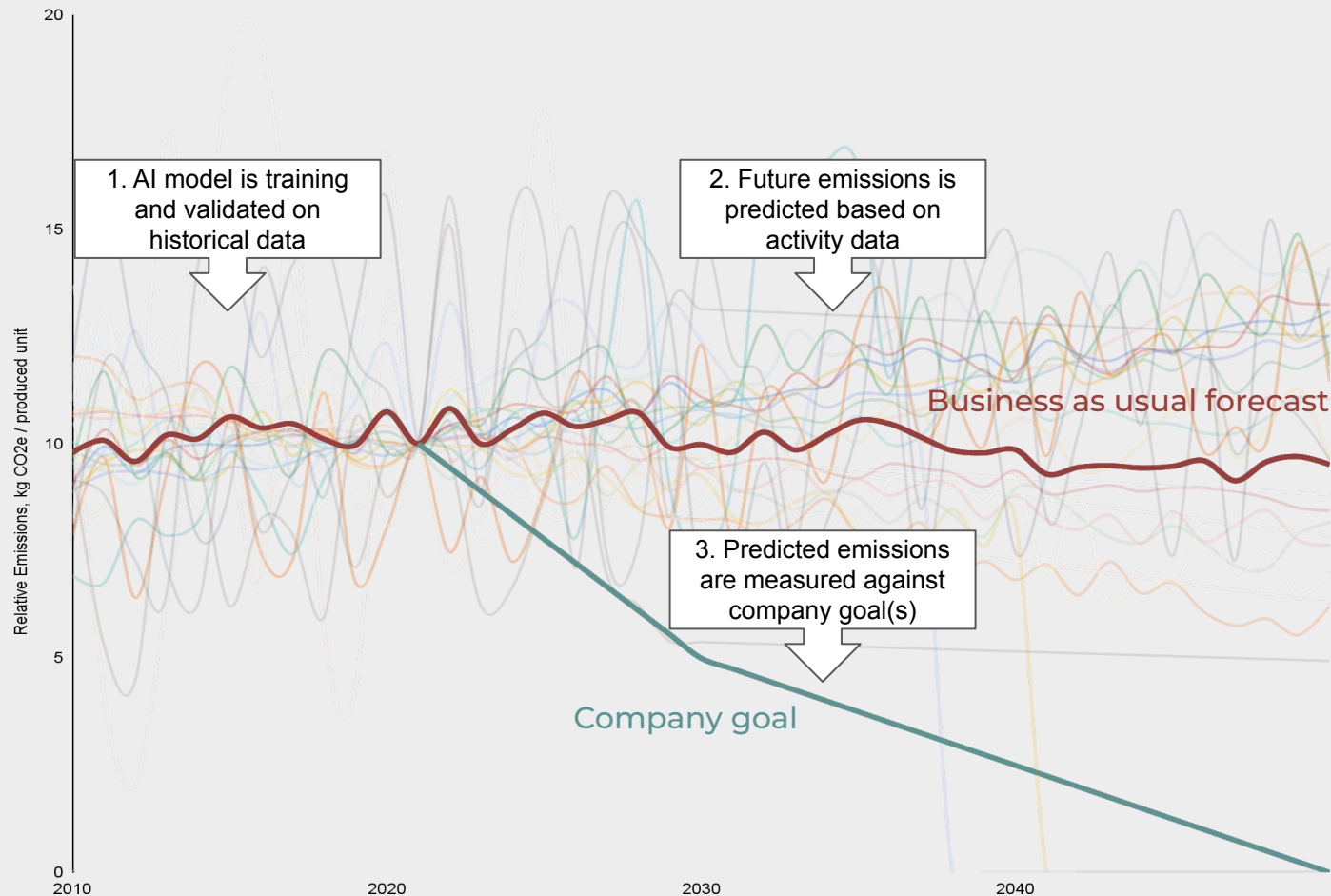
Energy efficiency measures

- Venting to flare
- Venting to production
- Fugitive emissions measure
- Compressor replacement
- Reduced water injection
- Reduced gas injection
- Drilling improvements

Logistics

End of production measures

4. The system predicts the effect on mitigation measures on the fly



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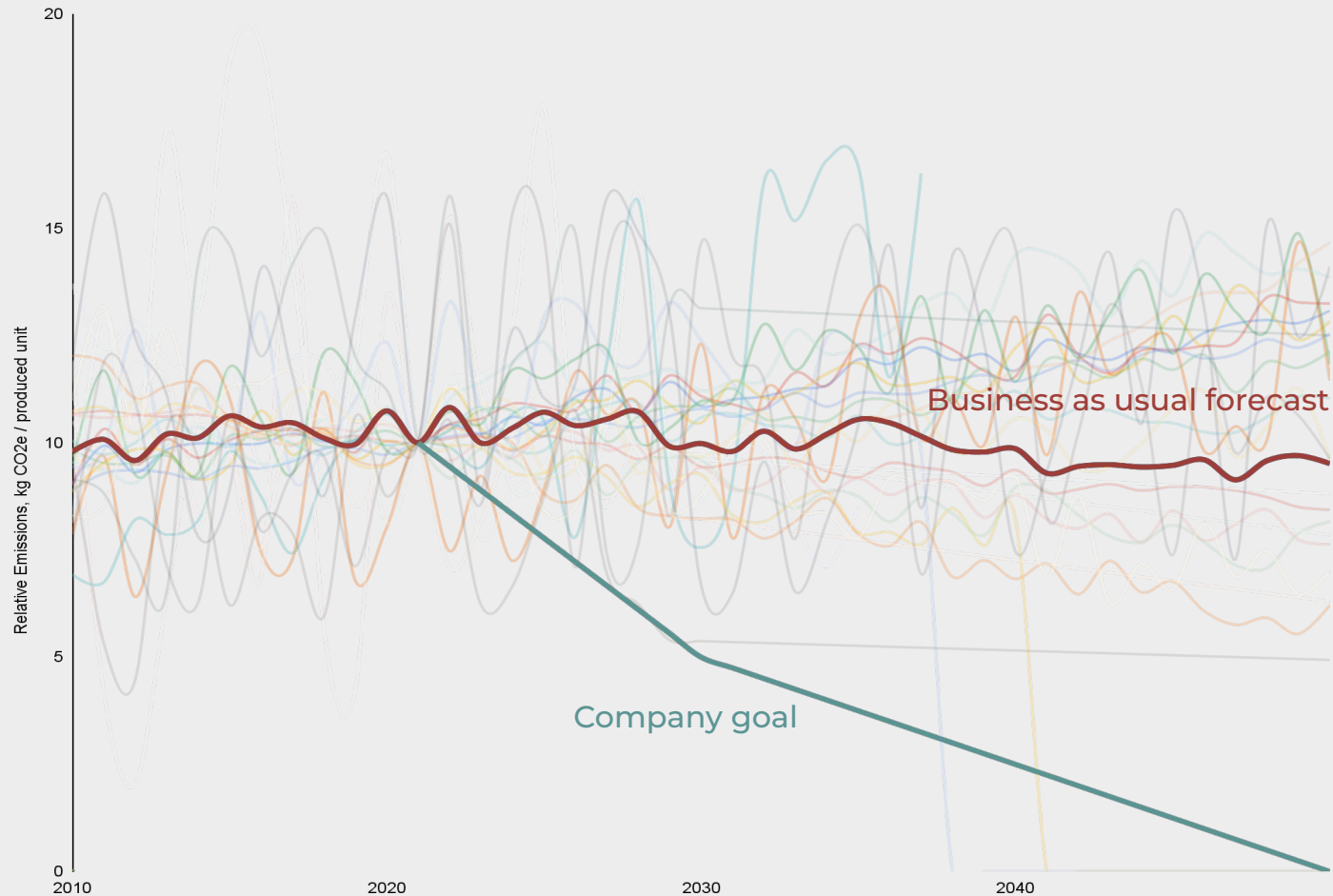
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Logistics

End of pipe measures

Carbon offsets

Company structure



Scenario Tuning

Switch Energy Carrier

Ammonium

Biodiesel

20 / 28

Ethanol

Hydrogen

LNG

Methanol

Power from offshore wind

Power from shore

Energy efficiency measures

Venting to flare

Venting to production

Fugitive emissions measure

Compressor replacement

Reduced water injection

Reduced gas injection

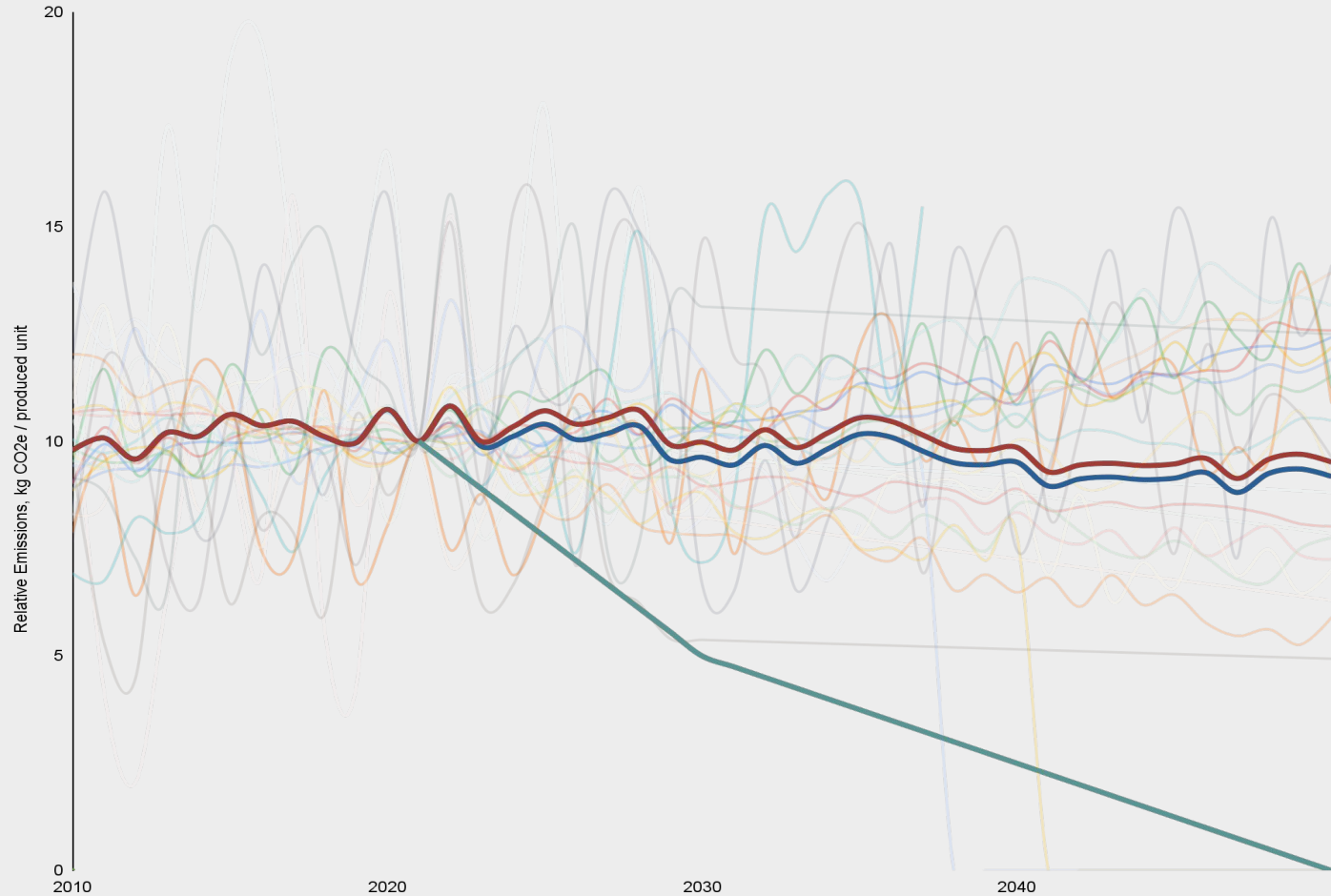
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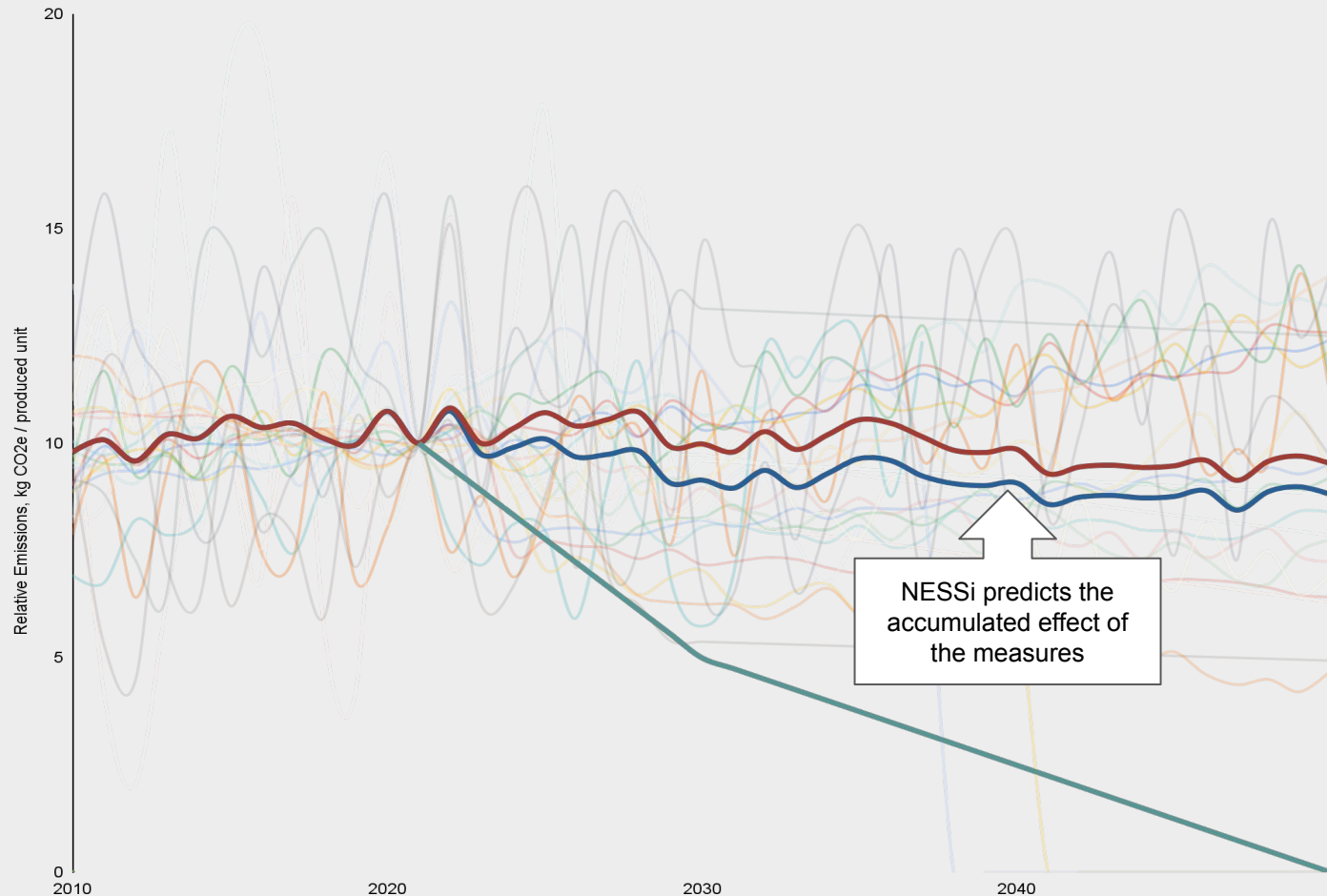
Energy efficiency measures

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- Drilling

Multiple mitigation measures can be added to the same scenario


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Scenario Tuning

Switch Energy Carrier

Ammonium Biodiesel 20 / 28 Ethanol Hydrogen LNG Methanol Power from offshore wind Power from shore 16 / 28 

Energy efficiency measures

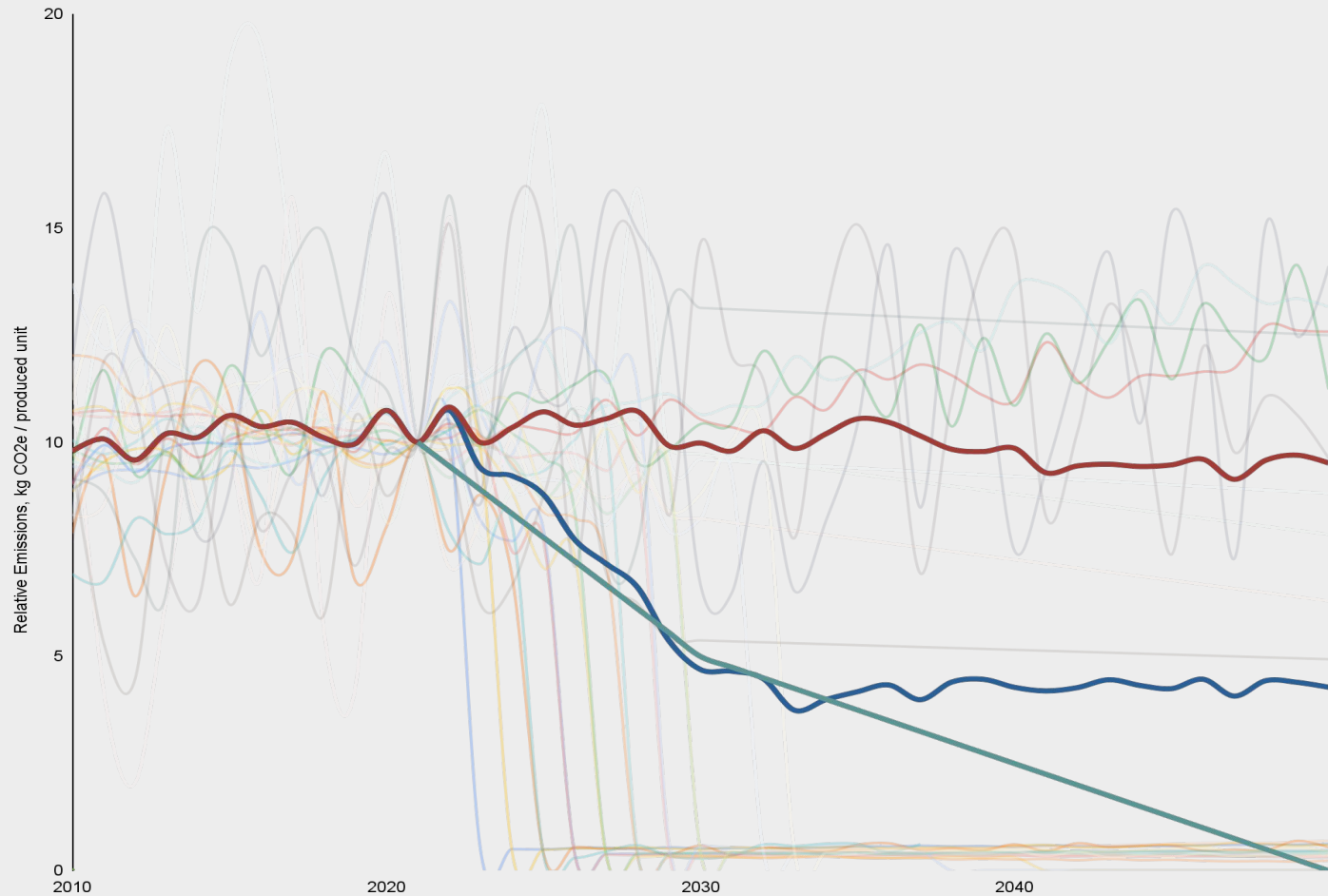
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Logistics

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






Scenario Tuning

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Energy efficiency measures

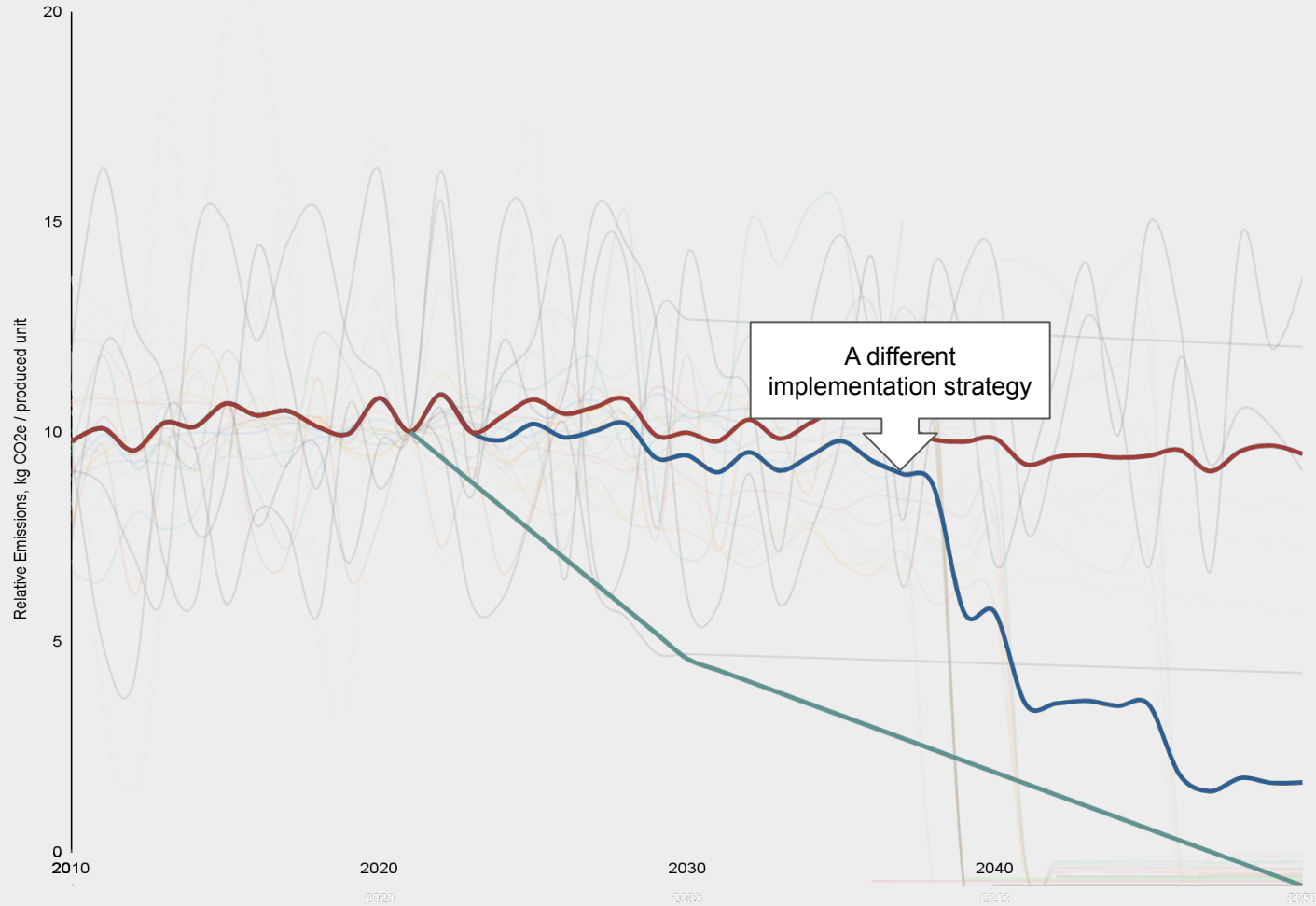
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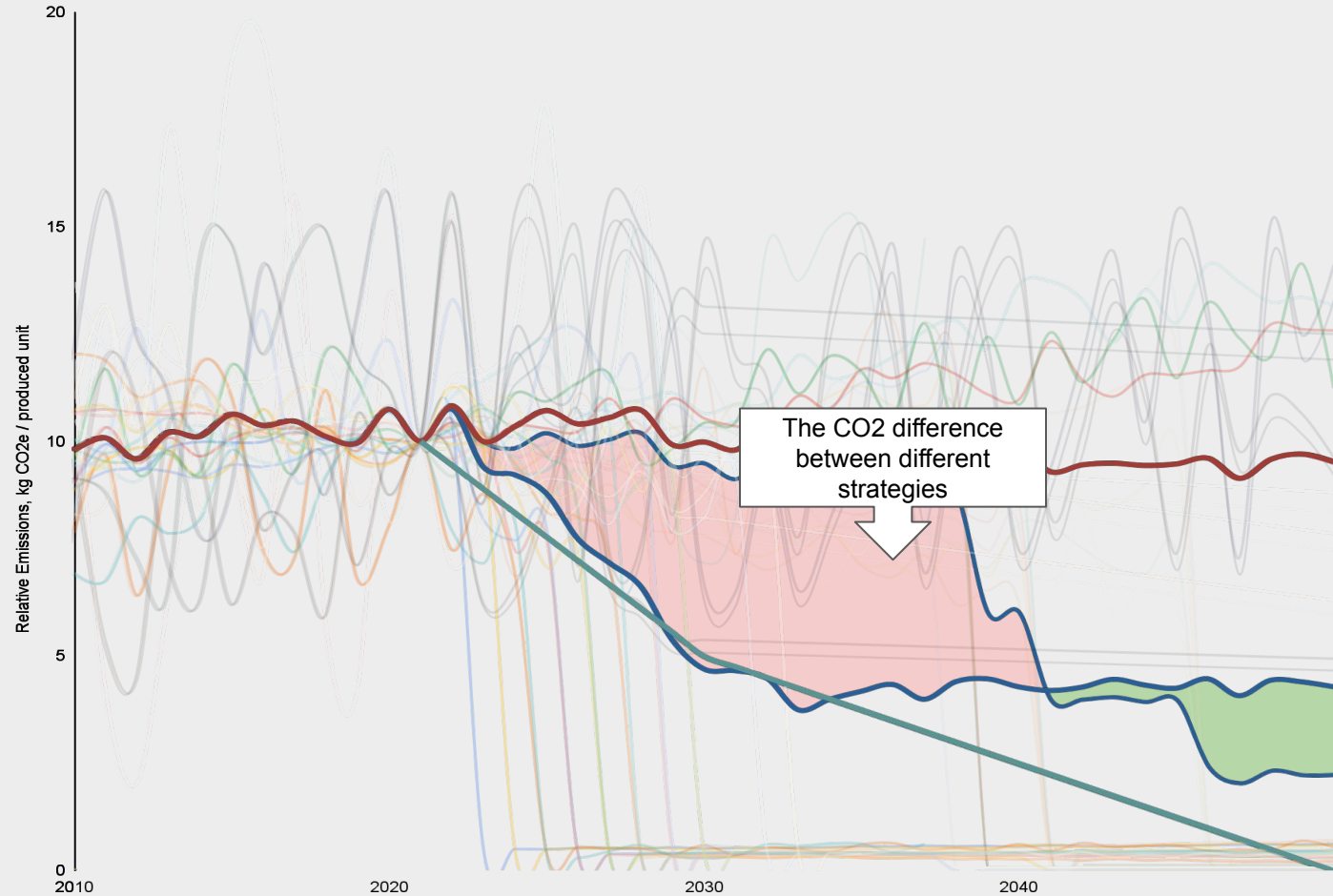
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Data need

Minimal Effort Needed

Customer will only need to provide minor amount of data

Novatech will harvest a lot of data

Provide learning across organizations



Training & Test Data

Activity data

Fuel / emission / electricity data

No need to allocate energy to activity



Activity Data

Platform

Oil export, gas export, gas injection, water injection, drilling, etc.

Supply

Transit, DP, anchor handling, etc.

Offices

Size, people, etc.





Usage

Predict the future emissions from single fields, hubs, or entire company on the fly

Predict the future emissions from downstream processing

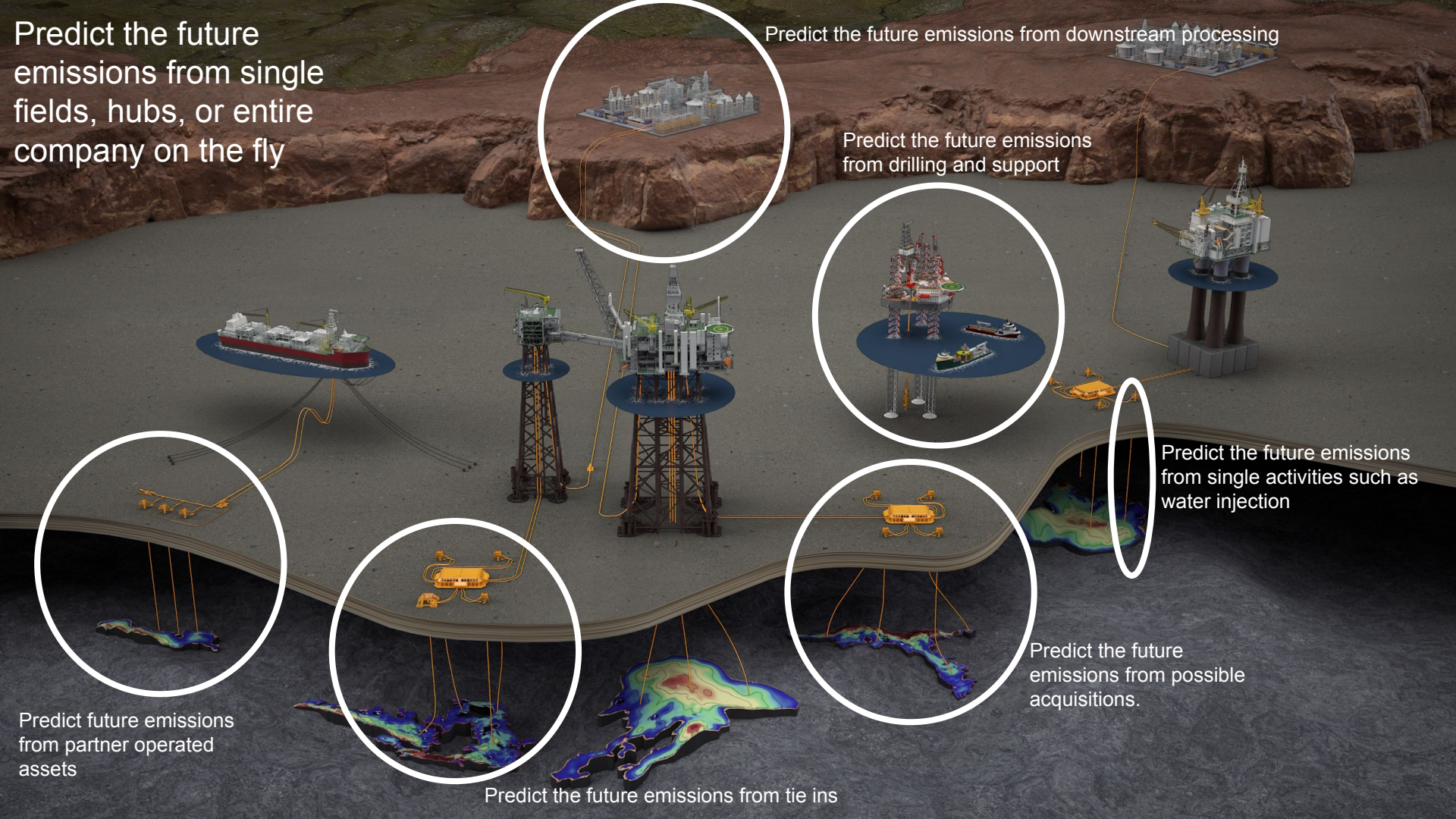
Predict the future emissions from drilling and support

Predict the future emissions from single activities such as water injection

Predict the future emissions from possible acquisitions.

Predict the future emissions from tie ins

Predict future emissions from partner operated assets



What is covered



Unlimited scenarios



Scope 1 and 2 emissions



Total emissions, equity emissions,
and emissions intensities (kg/Sm³ oe)



Energy, CO₂, CH₄ and N₂O



Cost savings (tax, ETS, and sold gas)

Use cases



Predict the effect of mitigation strategies



Sensitivity analyses for different scenarios



See the effect of possible new acquisitions

Including tie-ins without customer's ownership



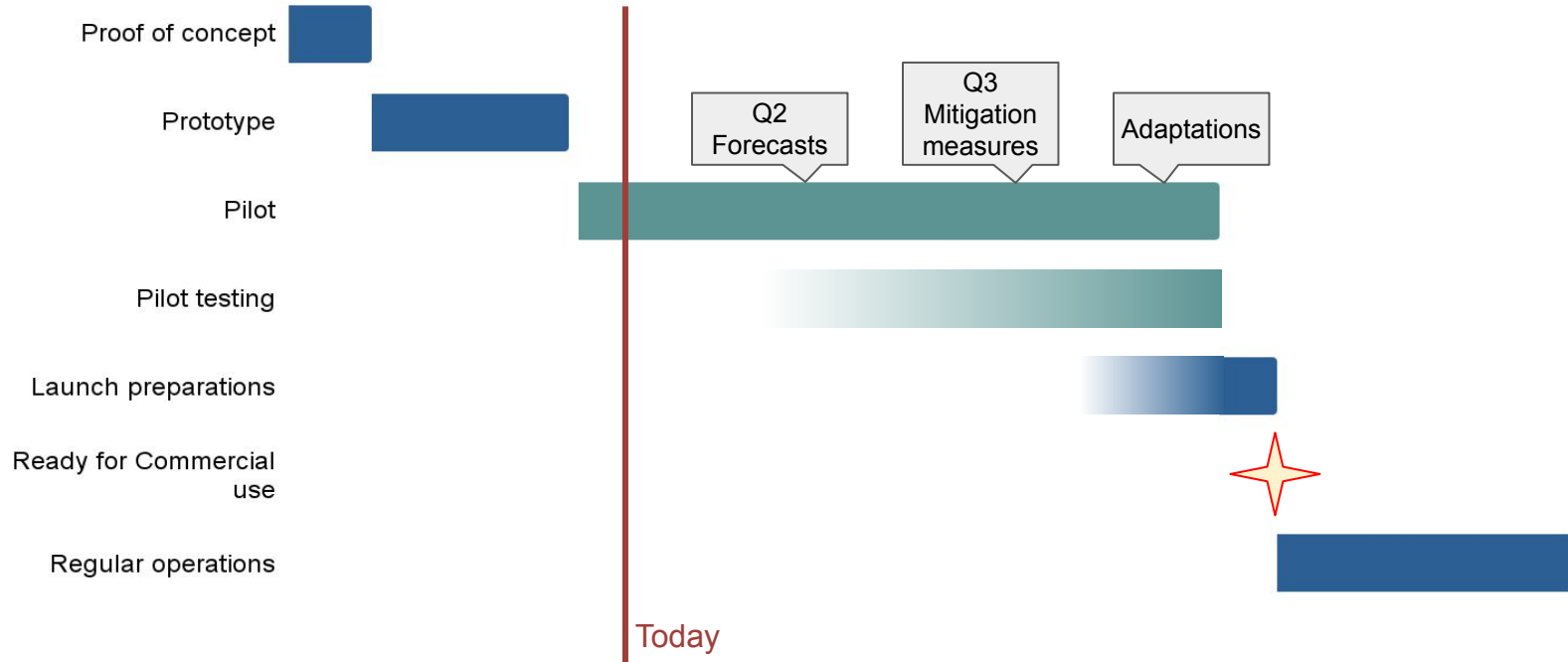
Input to further studies

Financial, abatement cost, feasibility, etc



Project plan

Stages





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Thank you!

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