

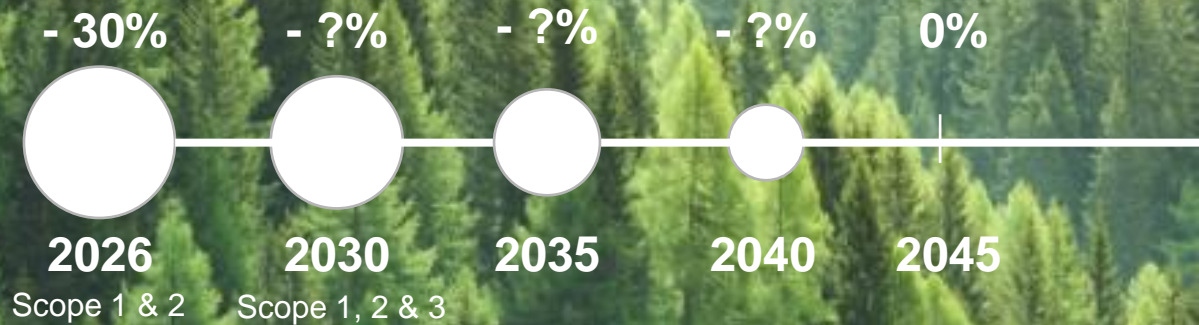
Pilot-scale test of bio-coal pellets in the Sponge Iron Process

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Climate targets



We are committed to reaching net-zero value chain GHG emissions by no later than 2045

» Net-zero climate impact* by 2045

- 30% reduction of CO₂-emissions by 2026 (from 2018 levels, scope 1 and 2)
- 1% increased energy efficiency year on year
- Almost 50% of CO₂ emissions (scope 1 & 2) comes from process coal

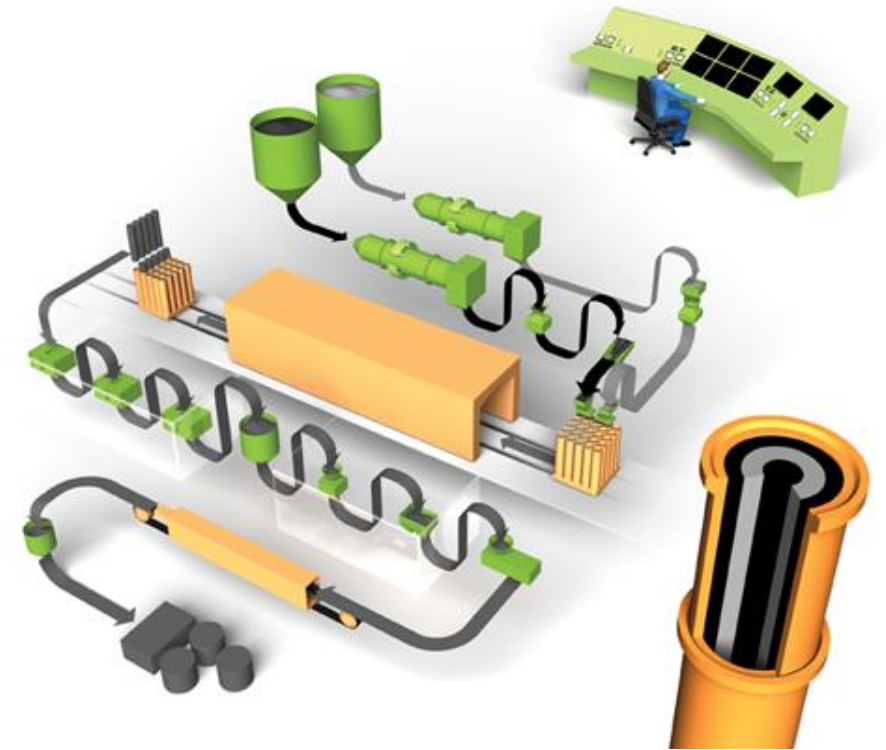
*Net-zero climate impact means the balance between greenhouse-gas (GHG) emissions produced and those removed from the atmosphere.

Background

- » Concept tested 2018, replacement of Anthracite with Biochar pellets in 10 railcars, **with positive outcome!**
- » Potential to replace **8500 ton Anthracite/year with Biochar**
- » **-27 000 ton** fossil CO₂/year (**10%** of Höganäs Group)
- » **“19 000 ton”** renewable Sponge Iron/year

Next step, 1-2 month test in full-scale operation (Q4 2021-Q2 2022) to investigate the steady-state effects and operational capability:

- Change in NG consumption?
- Effect on material side-streams?
- Long-term sponge iron quality?
- New raw material handling and storage considerations?
- Full production cost?



Project Activities

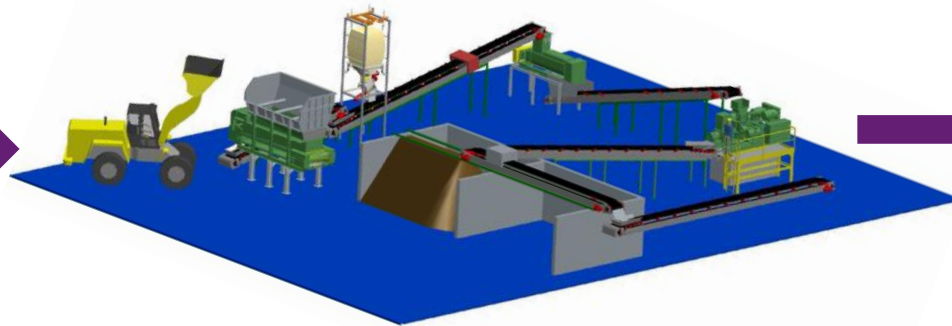
December 2021 to April 2022

May to June 2022

Charcoal Supply



Process tent,
Pilot pelletizing
charcoal + additives, + water



Drying
Drying using residual heat from Sponge Plant

Storage tent



Höganäs Sponge Iron Plant

1 month operation
CO2 savings = 2000 ton

