# Quantafuel -"A view into the next generation of sustainable fuel-innovation"

#### The problem we solve Plastic waste is filling our oceans and cause serious harm. Re-using the waste help clean up our future and create something valuable



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#### ...by re-using valuable resources

#### Alternative feedstock sources Currently plastic waste, biomass and non-captured natural gas are unused resources causing huge environmental and financial problems

Quantafuel's alternative hydrocarbon feedstock

**Time-to-market** 



Secondary focus

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Not currently prioritised

Not prioritised 0181 4

What we do Quantafuel owns and operates small plants converting plastic waste into environmentally friendly, synthetic diesel sold in the regular diesel market



#### Historical technology development technology is developed over several stages since 2007 QUANTAFU with several pilot plants and 3<sup>rd</sup> part verification



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# Quantafuel has initiated construction of first European plant and has an extensive project backlog

#### 1<sup>st</sup> commercial plant Attracting partners **Close cooperation with** Skive officially opened and industry, investors & NGOs construction initiated **ENOVA Vitol** e) ginnerup **AVINOR** ZERO 💭 🕥 nomi 4s NORSK (()) ENERGI SINTEF Skive plant officially opened, with all Investors in top-co, plants and R&D agreements and approvals in place Industry with fuel players, recycling and Equity investors in place, 60 % debt facility under way - in place this year others Strong support from gov. agencies, funds Expected first oil Q3 2018 and NGOs 1)



1) Including, but not limited to Skive kommune, Oslo kommune, Enova, Danmarks Grønne Investeringsfond, ZERO, WWF and more



A natural next step with high yieldcatalyst

Bringing 11 years of RnD on proven technology Join the industry on the pathway to cost effective sustainable aviation Repeat our results on a relevant scale

#### Quantafuel's Jet biofuel project

#### **Expected Innovation Objectives:**

- Verify the jet fuel technology in pilot scale (wood chips)
- Provide data to widen feedstock range (forest residues)
- Proof of concept (Quantafuel's F-T design for catalyst and reactor)
- Provide design data for upscaling
- Reduced GHG emissions in production of jet fuel

#### The checklist:

- ✓ Location Treklyngen
- ✓ Industry partner / AVINOR
- Independent environmental foundation ZERO

ONTNU FRONTMATEC

SINTEF

- ✓ Initial funding ENOVA
- ✓ Technology and research partner
- Partner funding

## The pilot plant will contribute to...

Sending a clear message that the aviation industry is taking action in the global goal of reducing CO2-emissions

Following up on the IATA target and contributing to the goal of 1 billion passengers flying on bio jetfuel-mix by 2025

Show that Norwegian innovation in clean energy as well as forward-thinking policymakers will close the gap between the forest- and aviation industry, setting the pace for the next decades of sustainable air transportation

The potential to make global impact which lies in exporting an effective and costcompetitive technology that can be equally beneficial to implement in India or the U.S, as in Norway, regardless of feedstock qualities.

## QUANTAFUELhelp ensure

### sustainable plastic waste handling

