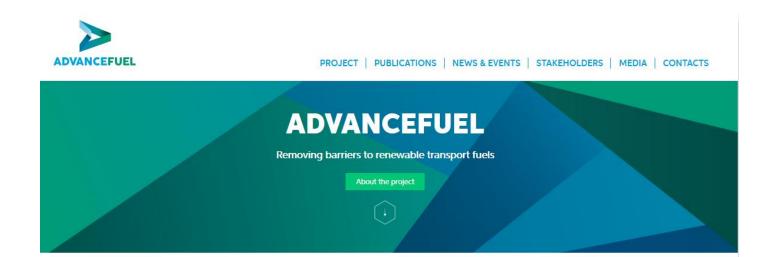
### http://www.advancefuel.eu/







Prof Martti Larmi, Aalto-yliopisto 14.5.2020



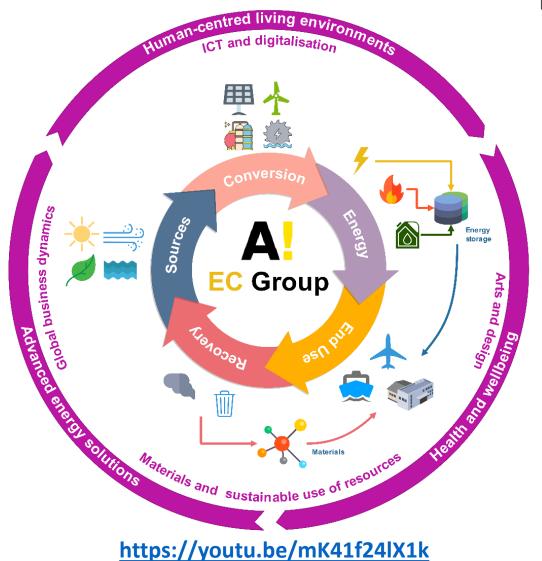
## The Research Group of Energy Conversion



**Prof. Ville Vuorinen** 



**Aalto University** 



Prof. Annukka Santasalo-Aarnio



Prof. Mika Järvinen





## **ADVANCEFUEL**

- ☐ Part of EU Horizon 2020
- ☐ Coordination and Support Action of EU Commission
- ☐ Facilitating market roll-out of advanced liquid biofuels in transportation sector between 2020 and 2030 and beyond

### **Partners:**



FNR – Fachagentur Nachwachsende Rohstoffe (Co-ordinator) Germany



of Technology Sweden



ECN - Energy Research Centre of the Netherlands The Netherlands



Greenovate! Europe Belgium



Universiteit Utrecht
Utrecht University
The Netherlands



ATB - Leibniz Institute for Agricultural Engineering and Bioeconomy Germany



Imperial College London United Kingdom



Aalto University Finland

### **Stakeholders:**













### Importance of the research

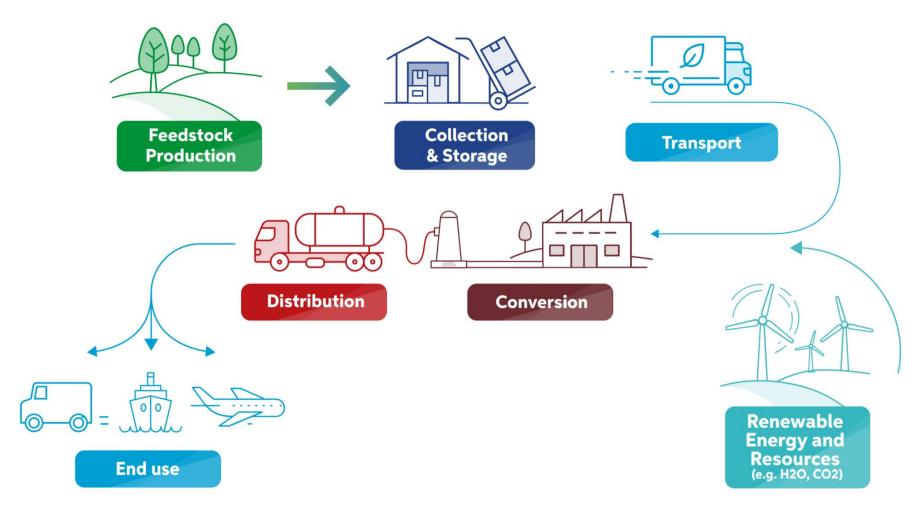
- Increased market acceptance and end-use of renewable fuels
- Support for decision makers and fuel producers
- Assessment of future potential of alternative fuels
- Providing market stakeholders with state-of-art knowledge and sophisticated, user-friendly tools with integrated calculators, standards, and recommendations.





## www.advancefuel.eu







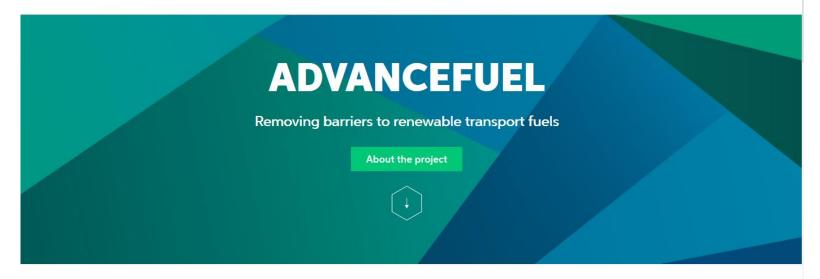


### www.advancefuel.eu





ROJECT | PUBLICATIONS | NEWS & EVENTS | STAKEHOLDERS | MEDIA | CONTACTS





The ADVANCEFUEL project is generating new knowledge, tools, standards and recommendations for overcoming barriers to the commercialisation of renewable transport fuels Check out our new video: potential of sustainable biomass for advanced biofuels





### REPORTS



D1.1 - Barriers to advanced liquid biofuels & renewable liquid fuels

ECN part of TNO





D1.2 - Monitoring framework & KPIs for advanced renewable liquid fuels ECN part of TNO





D1.3 - Setting up the common framework for the **ADVANCEFUEL** project ECN & Chalmers University of Technology



VIEW PDF



D1.4 - Monitoring framework & KPIs for advanced renewable liquid fuels (update)

ECN part of TNO





D2.1 - Lignocellulosic feedstock availability, market status and suitability

Utrecht University & ATB





D2.2 - Innovative cropping schemes for lignocellulosic feedstock production ATB









# End-use performance of alternative fuels in various modes of transportation.

Task 5.4: Fuel and fuel blend properties in end use (lead: AALTO)



## ADVANCEFUEL

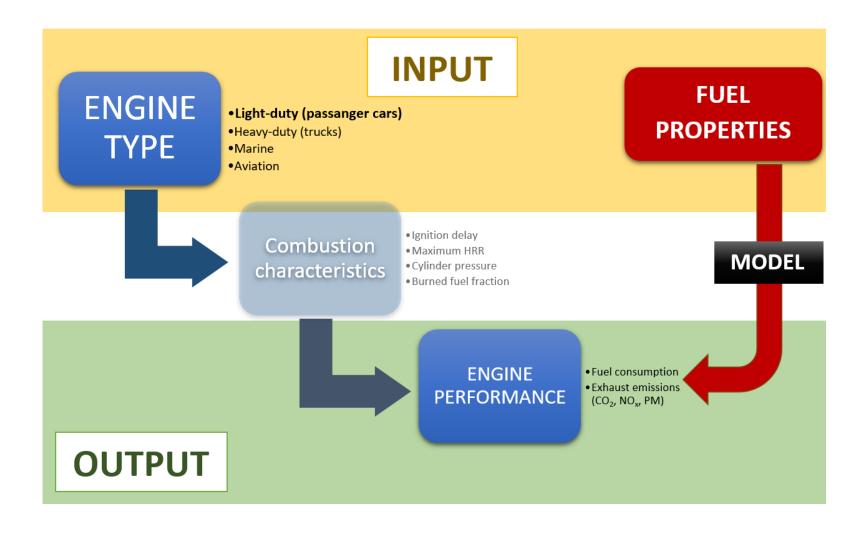
## Current Accomplishments, and Future Scope ADVANCEFUEL

Methodology Final models ready **Literature study Data collection Modelling and validation Publishing** development . . . . . . . Marine Other Heavy-duty Light duty • SI LDV - Published • CI HDV Aviation Model • CI LDV - Published published • SI LDV (modified, FFV) • Fuel Cell Vehicles



## Structure of the problem







End-use performance (fuel consumption and GHG emissions) of alternative fuels in various modes of transportation.

Aalto University Task 5.4: Fuel and fuel blend properties in end use (lead: AALTO)

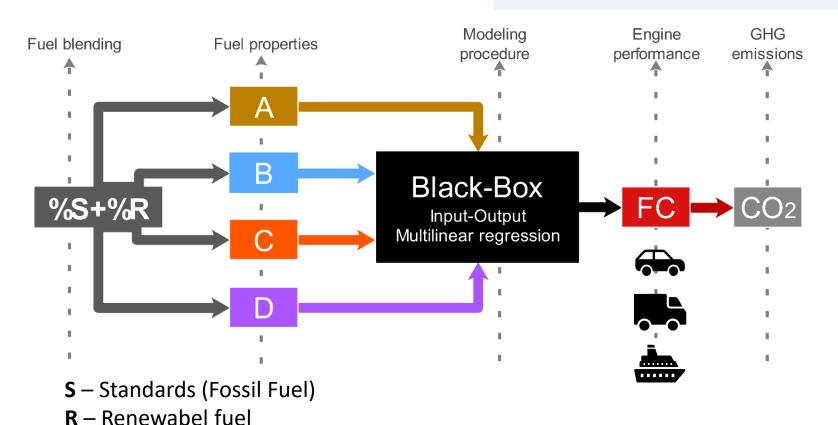


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### THE ONLINE TOOL

http://advancefuel.aalto.fi/



Removing barriers to renewable transport fuels Prediction of fuel consumption and GHG emissions for alternative fuels in various modes of transportation. Authors Ossi Kaario

ADVANCE > FUEL A? End-use performance of alternative fuels



## Together towards the sustainable future...

## Thank you for your attention!



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