



Alternative fuels

**A Sustainable path to
engines decarbonization.**

SAENA Workshop sponsored by Kohler

Workshop in Reggio Emilia (IT)
16 and 17 November 2022,
at Kohler Company

Conference venue:
Kohler | Via Cav. del Lav. A. Lombardini, 2
42124 Reggio Emilia
Registration, please contact: saena@im.cnr.it
www.sae-na.it

Wednesday 16 November 2022

h. **12.00** Registration

Kohler Engines Company Profile

h. **13.00** Lunch

h. **13.50** *Welcome of Kohler*

h. **14.00** *Ezio Mancaruso* - SAENA President & STEMS-CNR (Italy)

Luigi Arnone – SAENA Vice-President & Kohler Engines (Italy)

h. **14.30 – 16.00** Technical session I (30 minutes)

1 The future of combustion engines

Massimiliano Bonanni – Kohler Engines (Italy)

2 eFuels in the context of the EU Fit-for-55 package

Tobias Block - eFuel Alliance (Germany)

3 The role of Eni biofuels in the decarbonization pathway

Elena Maria Rebesco - Eni (Italy)

h. **16.00–16.30** Coffee Break

h. **16.30–18.00** Technical session II (30 minutes)

4 Technology openness as key enabler for transport decarbonization

Andrea Gerini - IVECO Group (Italy)

5 Optimisation of combustion systems to harness the benefits of Hydrogen fuel

Richard Penning – Ricardo UK Ltd (United Kingdom)

6 FEV's Perspective on future fuels for large engines

Fabio Mallamo - FEV Italia (Italy)

h. **20.00** Dinner offered by KOHLER Engines

Thursday 17 November 2022

h. 9.00 – 10.30 Technical session III (30 minutes)

7 Hydrogen: one of the main pillars of a decarbonized energy system

Panayotis Dimopoulos Eggenschwiler - Empa Swiss federal laboratories for Materials Science and Technology (Switzerland)

8 Hydrogen Technologies in heavy duty applications

Elio Jannelli & Giovanni di Ilio – Università Parthenope (Italy)

9 The Role of CFD to Decarbonize Internal Combustion Engines

Alessandro d'Adamo – Università di Modena e Reggio Emilia (Italy)

h. 10.30-11.00 Coffee Break

h. 11.00 – 12.30 Technical session IV (30 minutes)

10 The role of hydrogen and eFuel in Europe's transportation sector

Klingl Stephan - Dena (Germany)

11 Towards Lean combustion of CH₄-H₂ blends in a pre-chamber equipped engine as a solution for CO₂ reduction

Francesco Balduzzi - Università di Firenze (Italy)

12 Landi Renzo Experience on advanced pressure management platform for Hydrogen propulsion systems

Damiano Micelli - Landi Renzo Group (Italy)

h. 12.30-12.40 Closing remarks

h. 12.40 Lunch

h. 14.00 Visit to Kohler Engines Plant