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Vehicle fuel from biogas with carbon membranes; a comparison between simulation predictions and actual field demonstration

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Graphical Abstract

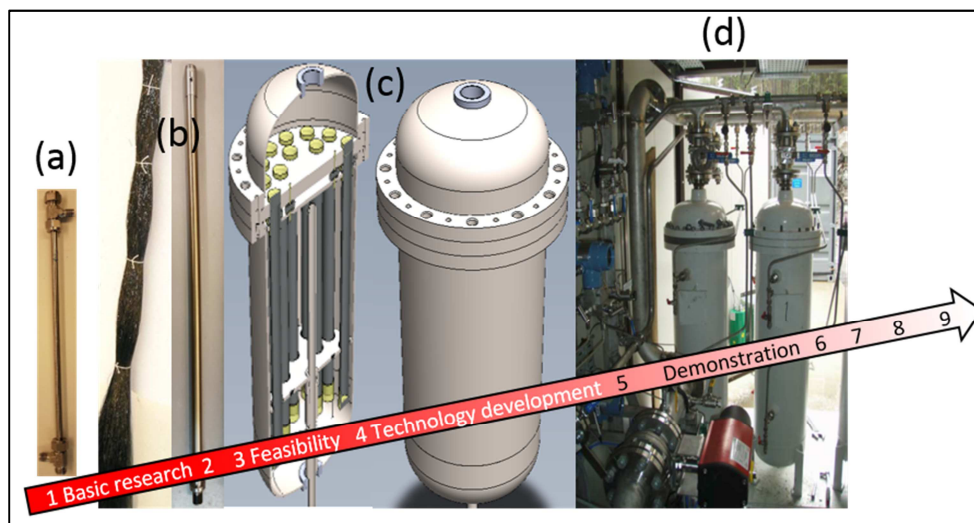


Figure 3 in the article:

Technology readiness level according to the EU commission/Up-Scaling from lab to pilot scale; (a) lab scale module, (b) medium sized module, (c) Multimodule, (d) Membrane Pilot plant

Highlight for graphical content:

Biomethane as vehicle fuel from biogas was upgraded in a carbon membrane-based pilot plant process. Applying a single stage separation operation meant a low energy usage; 0.13 kWh/(Nm³ of upgraded biogas). However, the brittleness of hollow fibers remained a challenge.

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