

### The client

We are working with an established chemical company that is looking for technologies for manufacturing sustainable C9-C16 paraffins (alkanes) and olefins (alkenes). The production of chemicals from renewable resources, rather than petroleum-based feedstocks, has the potential to reduce CO<sub>2</sub> emissions and defossilize production. C9-C16 paraffins (alkanes) and olefins (alkenes) are liquid hydrocarbons. They are used in a range of products including jet fuels, personal care products and solvents.

### The search

Our client is actively searching for technologies and approaches for manufacturing sustainably-produced C9-C16 linear paraffins (alkanes) and linear olefins (alkenes) that have some level of experimental proof of concept, TRL4 or above.

Examples of interesting technologies include (but are not limited to): -

- Production of sustainable aviation jet-fuels e.g., kerosene and drop-in hydrocarbons that could be optimised to yield linear paraffins
- Fischer Tropsch reactions
- Oligomerisation of shorter chain olefins (alkenes) or other chemical intermediates
- Fermentation processes

Potential solutions should ideally have the following benefits: -

- Carbon source is biomass feedstocks, other non-fossil fuel waste, CO<sub>2</sub> capture, or oleochemicals (*plastic waste and other recycled petrochemicals are not in scope*)
- Low-cost raw materials and a high yielding manufacturing process
- Products are linear C9-C16 paraffin or olefin molecules with <5% branching
- Paraffins with higher branching (up to 75%) could be accepted but are much less valuable products for our client
- Information on environmental impacts e.g., life cycle analysis or CO<sub>2</sub>eq calculations
- Low energy and/or water consumption

Potential partners of interest include established companies, SMEs, start-ups, universities and research institutes with relevant technologies, applicable to sustainable jet-fuels, personal care, consumer healthcare, specialty chemicals, synthetic biology or biorefineries.

### What the client can offer

The client has global processing operations with well-established customer base and market access. They are open to exploring different ways of working with technology developers ranging from collaborative research and development projects e.g., for production scale up, and / or technology licensing, IP filing, investment (e.g., joint-ventures or mergers / acquisition). Please provide details of any potential technology partner or service provider to Diane Kolonko via [diane@strategicallies.co.uk](mailto:diane@strategicallies.co.uk)