



## Bio-based alkanes/alkenes production

Flavors and fragrances, cosmetics, lubricants, surfactants, pesticides, fine chemicals, bioplastics, biofuels, detergents, adhesives, solvents, dispersants for dyes, textile finishing - the potential applications of bio-based alkanes and alkenes seem almost endless. At acib, we provide the tools to make this vision a reality.

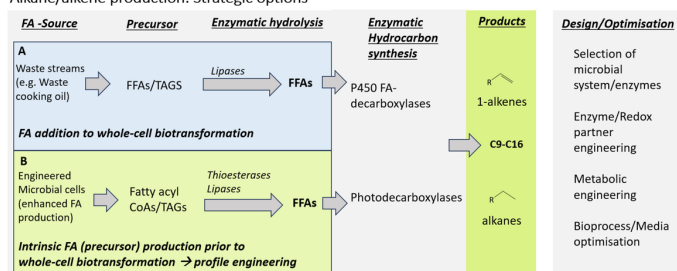
### BACKGROUND

Alkanes and alkenes are essential chemicals with wide-ranging applications across industries. However, reliance on petroleum-based variants leads to severe challenges including finite reserves, negative impact on climate change and the environment, geopolitical instability, supply-chain problems, strong price fluctuations and health risks upon exposure. There is an urgent need for transitioning to sustainable bio-based hydrocarbons, which are renewable, typically biodegradable, and environmentally benign, as well as an important building block for strategic independence and localized production. Moreover, bio-based production offers the opportunity to specifically engineer and tailor bio-based alkanes and alkenes so that their functionalities meet specific application requirements.

### TECHNOLOGY

acib has extensive experience in enzyme and strain development for bio-based hydrocarbons generation. We recognize a growing demand for C9-C16 alkanes and alkenes and possess the expertise to specifically tailor these compounds to meet your relevant requirements.

Alkane/alkene production: Strategic options



### OFFER

acib offers an exclusive opportunity to co-develop tailored microbial strains, for the production of your chosen alkane/alkene. We provide assistance with upscaling if needed, ensuring seamless transition from laboratory to industrial-scale production. Intellectual property (IP) generated during the collaboration can be transferred to you, our investor/industrial partner. By partnering with acib, you can lead the way in establishing cost-effective bio-based hydrocarbon production and contribute to a more sustainable future.

### acib-EXPERTS:

Prof. Dr. Harald Pichler  
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### DEVELOPMENT STATUS:

TRL 2 - 3

### KEYWORDS:

Hydrocarbons  
Alkanes  
Alkenes  
Bio-based  
Sustainable

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