



## AWARDS



German Founders Award  
Best start-up 2018

**INNOVATIONSPREIS  
DER DEUTSCHEN  
GASWIRTSCHAFT  
2018**

Innovation award of the  
German gas industry  
Best start-up 2018



Clean Tech Open Award  
Global Ideas Winner 2017



To download the flyer  
scan QR-Code.

**MICRO STRUCTURE, MEGA IMPACT!**

## CONTACT

Want to know more about our company?  
We are happy to hear from you.

### INERATEC GMBH

Siemensallee 84  
D-76187 Karlsruhe

**T** +49 721 864 844 60

**M** [info@ineratec.de](mailto:info@ineratec.de)

[www.ineratec.com](http://www.ineratec.com)

### INERATEC Switzerland AG

Zeltweg 44  
CH-8032 Zurich

**T** +41 79 238 41 71

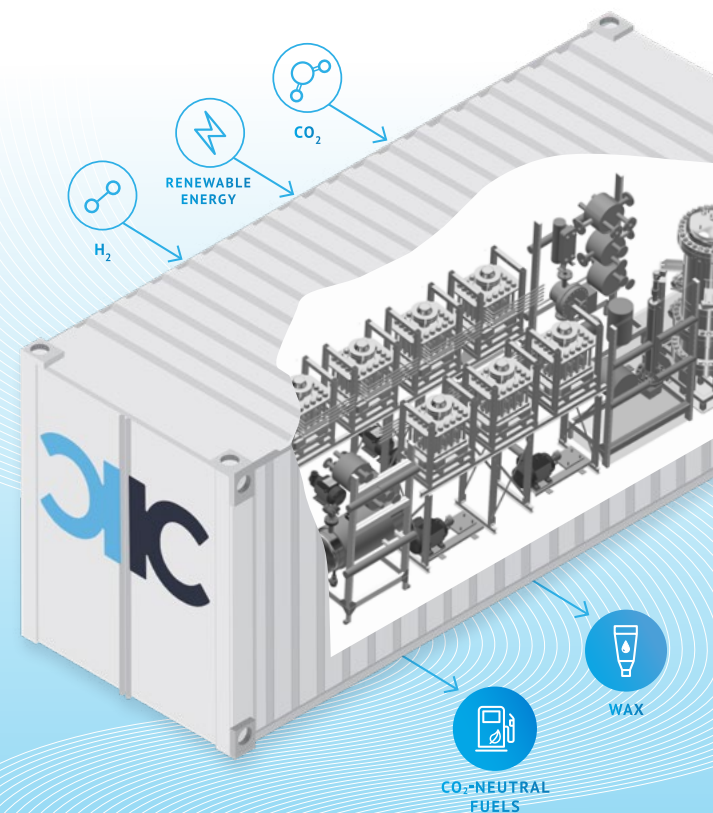
**M** [kontakt@ineratec.ch](mailto:kontakt@ineratec.ch)

[www.ineratec.ch](http://www.ineratec.ch)

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# COMPACT CHEMICAL PLANTS



## ABOUT INERATEC

By using greenhouse gases and renewable energy, INERATEC enables the production of a climate-neutral alternative to fossil products.

At the plant's core there are innovative, micro-structured reactors. Due to their surface structure and the intensified heat transfer, they are particularly compact. They provide not only a high load flexibility but also quick start-up, and shut-down times.

The energy supply from renewable sources is subject to natural fluctuations. Because of the short start-up, and shut-down times, the plants are ideal for the storage of renewable energy in synthetic hydrocarbons. Those can be characterized by their high storage capacity and energy density.

The plant's properties enable a decentral or central implementation. They are scalable due to the modular approach of INERATEC.



MODULAR



CENTRALIZED & DECENTRALIZED



MICRO-STRUCTURED



NUMBERING-UP

## PROCESSES

### POWER TO LIQUID (PtL)

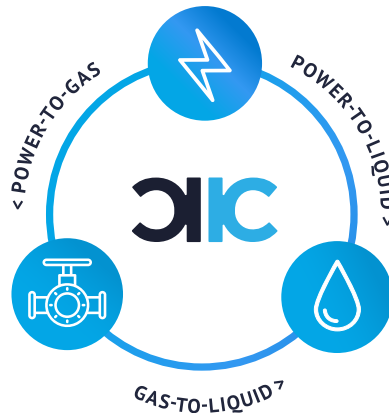
Synthesis gas is produced from CO<sub>2</sub> and renewable hydrogen, the latter attained via electrolysis. In the following step, this gas is converted into renewable, synthetic fuels and waxes.

### POWER TO GAS (PtG)

Greenhouse gases and renewable hydrogen are converted into synthetic natural gas.

### GAS TO LIQUID (GtL)

Gas to Liquid is a two-stage process. Synthesis gas is first produced from methane and air, and then converted into synthetic fuels and waxes.



## SYNTHETIC PRODUCTS



GASOLINE



CLEAN DIESEL



e-KEROSENE



WAX

A variety of synthetic hydrocarbons can be produced. They have a wide range of applications. For instance, in the area of mobility, the possibilities range from automobile to air traffic. Synthetic waxes can be used in the chemical industry.

## SERVICE



BASIC ENGINEERING



DETAIL ENGINEERING



CONSTRUCTION & COMMISSIONING



MAINTENANCE & SERVICE

We offer solutions ranging from pilot applications to chemical plants in series production.