



MARKET-READY TECHNOLOGY

- Short-term solution for sustainable mobility
- Part of mobility mix of the future
- Strengthening Germany as an innovation leader in the field of drive diversity



QUALITY

- Competitive
- According to DIN EN 228
- Lower consumption due to higher energy content



SUSTAINABILITY

- CO2 neutral through P2X route
- reduced emission of pollutants



INFRASTRUCTURE

- Transportation and storage of electrical energy
- Existing fleet more climate-friendly
- Fuel station network available

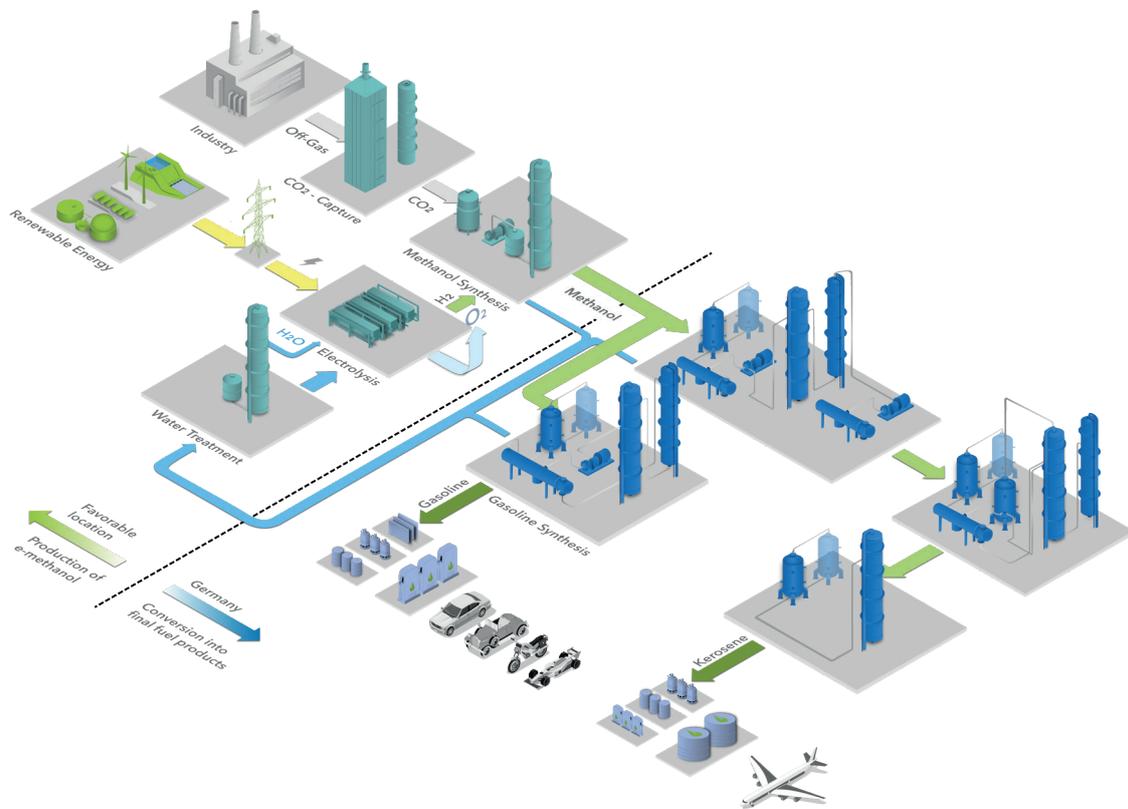


ALWAYS AN IDEA AHEAD

ENTER THE LOW CARBON WORLD

Against the background of global warming, political actors, not least due to the new objectives of the European Union, and industry are striving to **defossilize** the world, with the goal of reducing CO₂ emissions in all areas. Business models proven over the course of decades are in a state of flux. Energy providers, refineries and car manufacturers in particular see the need to develop new products and business models, thereby meeting government specifications. CAC is addressing these challenges by developing and offering new technologies for our customers.

opportunities. The methanol can be produced from hydrogen, which is obtained via water electrolysis, and CO₂ from industrial exhaust gases. The energy requirements of electrolysis are to be met from renewable energies. All of the individual stages of the technologies required for this are already applied on an industrial scale. This means that a process chain can be established for E-fuels that enables the manufacture of gasoline with significantly lower CO₂ emissions. Considering the production chain in its entirety, the **CO₂ emissions** of this E-fuel are **90 % lower than for a comparable fossil gasoline**. As part of



Market-ready E-fuel technology

The successful development of synthetic gasoline makes a key contribution to the political goals. Thanks to the operation of the demonstration plant that we established at TU Bergakademie Freiberg in 2010, it has now been established that the **technology is ready for market**. We are immediately capable of building plants to manufacture synthetic gasoline on an industrial scale.

90% fewer CO₂ emissions

With regard to the environmental aspect, the manufacture of synthetic gasoline from methanol offers far-reaching

a future mobility mix, over 1.3 billion existing vehicles can be powered in a more climate neutral manner.

Quality advantage

Engine developers and car manufacturers have already tested our gasoline and are highly satisfied with the results. The positive characteristics of synthetic gasoline also result in markedly **improved combustion properties** in engines. This is manifested in aspects such as reduced particle formation, a further benefit for environmental protection.