

Waste becomes E-Fuel

Ecolyd⁷¹
Applications

Clean environment, clean energy

Zellstrom offers innovative technology with Ecolyd 7.1. It disposes of waste and wastewater through transformation. In a single process, Ecolyd 7.1 converts a wide range of waste, such as plastic, waste oil, tires, or bioresidues and wastewater, into e-fuel through a synthesis process. Process heat, drinking water, and oxygen are produced as by-products. This compact technology is mobile thanks to its container design and can be used locally all over the world.

If the necessary energy is generated by a wind turbine or solar panels, the result is a CO2-neutral and flexible system that works independently of power lines and power plants. Ecoyd 7.1 is scalable and can be deployed worldwide on a just-in-time basis.

Ecolyd 7.1 offers enormous advantages for the environment. Its compact design significantly

Ökology Waste Disposal & Recycling Plastic Waste Recycling Fats and waste oils Recycling & Processing Disposal Accidents & Recycling & Salt Water Used tires& Household waste Recycling Recycling Biowaste Wastewater (Ecolyd^{7.1} Salt water Economy Medicine (Oxycene) & Industry Windkraft & Solar E-Fuel as a low-cost CO2-neutral mobility liquid storage medium Heat E-fuel for combustion forwind power and E-Fuel engines and mobile **Trinking** solar energy chargers for e-mobility water District heating Water Heating Clean heating Off-grid power without new pipes CO2-neutral electricity Pure anytime, anywhere industrial water Tankers & ships Clean & economical Water desalination methanol engines for irrigation **New Industry** Development and construction Methanol enginesn

Applications E-Fuel

A) Fluid storage for extended running time

Ecolyd 7.1 extends and optimizes wind and solar power through continuous energy capture and long-term storage in the form of e-fuel. E-fuel can be stored safely and cost-effectively and is easy to transport. This technology therefore enables the independent generation of electricity, heat, and cooling—anytime, anywhere.

B) CO2-neutral mobility

E-fuel from waste can replace conventional fuel and reduce a large proportion of the CO2 emissions produced by 300 million trucks and buses, 1.5 billion cars, and 60,000 cargo and passenger ships with conventional propulsion systems. Immediately. On the other hand, e-mobility is being supported. Mobile "superchargers" are powered by e-fuel and guarantee charging points all over the world. Just in time and without the need for a power grid.

C) Secure power supply

CO2-neutral electricity – anywhere, anytime. Even in remote or hard-to-reach regions, Ecolyd 7.1 ensures the power supply – without long overhead lines.

D) Heating

With E-Fuel, buildings can be heated largely using existing gas and diesel heating systems. Transport is via existing gas pipelines or heating oil tankers. Within a very short time, heating can be CO2-neutral without any significant financial outlay. Process heat can also be used for heating.

E) New industry

E-fuel can spur the development and construction of methanol engines. A whole new industry could emerge and boost the economy.

Economic environmental protection

Ecolyd 7.1 is an important bridging technology on the path to a largely CO2-neutral world. Waste and wastewater are converted into energy. And water. And oxygen. Ecolyd 7.1 is a mini format technology with maximum performance. Ecolyd 7.1 costs only a fraction of large-scale systems, saves considerable resources and CO2. It can be used anywhere in the world, just in time.

Mobility can become CO2-neutral in a very short time, as can the heating of buildings. The efficiency of wind and solar power is increased and power grids are stabilized. In remote or arid regions without power grids, it can be used to secure the energy supply. On top of that, the high process heat is also ideal for heating buildings via district heating. This reduces the burden on the environment and strengthens the economy.

Just quickly saved the world.

There's a lot to do. Let's get started!



Zellstrom GmbH Zülowstr. 16 15827 Mahlow

www.zellstrom.com info@zellstrom.com