



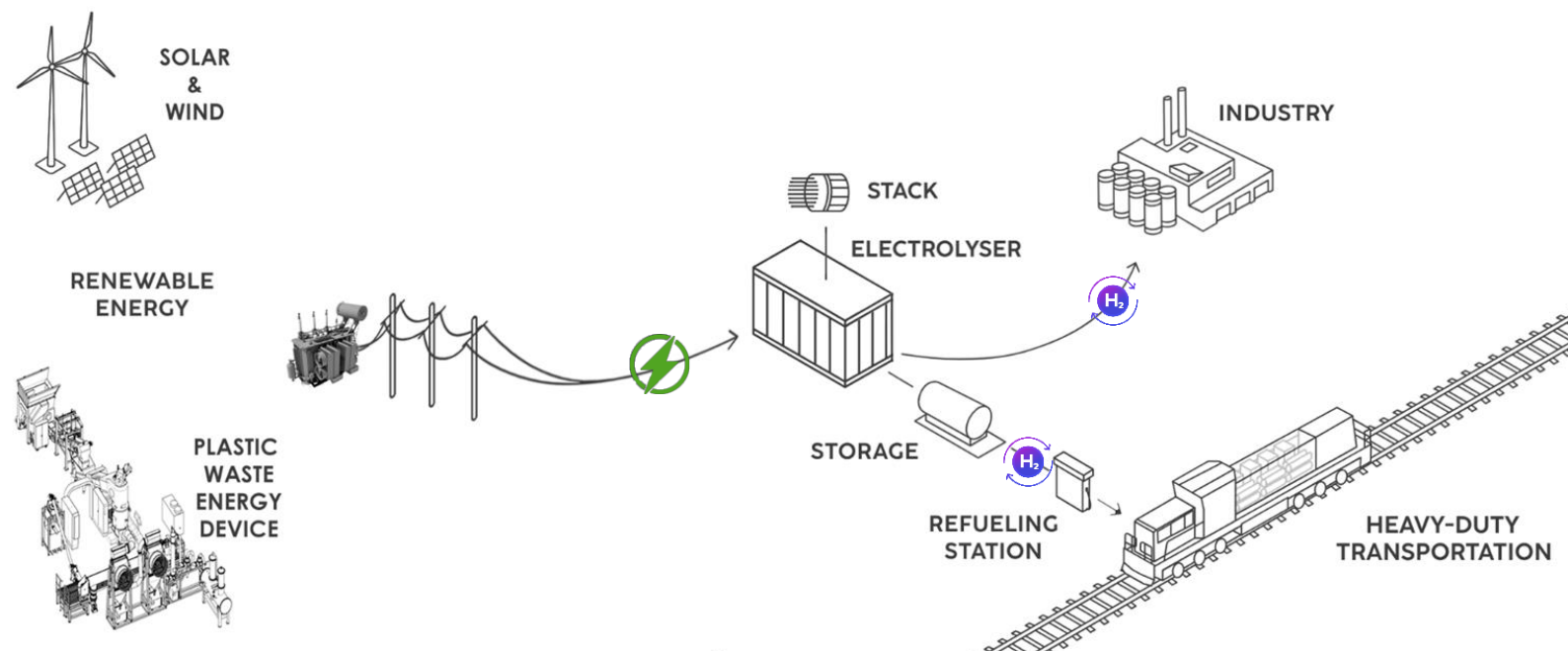
<https://addryn.com>

P W E D

Plastic Waste Energy Device

SHORT INFO v 0.5

January 2024



ADDRYN d.o.o. and P.W.E.D. d.o.o.

ADDRYN d.o.o. consists of a group of individuals and companies, from various parts of the world, gathered around the development of technology, production, cultivation, processing, and construction that enable the concept of circular economy, green chemistry and hedonistic sustainability. One area that ADDRYN d.o.o. deals with is solving the problem of plastic waste that suffocates the world. We have shaped our solution for this into Plastic Waste Energy Device, PWED, technology. In 2024 we are starting production this technology in a separate company P.W.E.D. d.o.o. in Ivanec, Croatia,

Electricity from plastic waste

The effect of PWED technology depends on the composition and amount of plastic waste used as an input. Therefore, the calculations shown in all materials of P.W.E.D. d.o.o. represent medium calculations, not precise values. We help the environment by converting plastic waste into electricity, heat and/or hydrogen and food.

P.W.E.D. d.o.o. is dedicated to developing technology designed to address the global crisis caused by plastic waste. Our groundbreaking plastic waste processing power plant technology converts mixed plastic waste into renewable energy sources that can be stored and then into electricity with outstanding efficiency in an environmentally friendly way. Our advanced technology produces an abundance of precious energy by eliminating large amounts of accumulated plastic waste.

The plastic processing plant provides an efficient and timely solution to the European Union's energy challenges. This economical technology leads to instant and impressive results. The plant is installed, from planning to turnkey handover, in 9 months.

New, alternative energy

The European Union has prioritized managing the current energy crisis on the continent, which is causing enormous economic problems. Building on the current economic environment of the energy industry, it is essential to find alternative and efficient solutions suitable for energy production to reduce the EU's energy dependence on oil and gas. This task requires the implementation of easily accessible alternative energy generation technologies for Member States to reduce their energy dependence as soon as possible.

The European Union's goal is to increase the recycling of plastic waste and/or to find an economically and environmentally sound use of plastic waste as a high-value energy raw material for electricity generation, heat and/or hydrogen and food.

Present

Industrial-scale PWED technology is available. There are no emissions, microplastics, residual waste and ash, and the output is clean electricity.

PWED technology is suitable for supplying electricity to hospitals, communication centers and other essential infrastructure in "island" mode. This mode can be maintained even when for

any reason (e.g. natural disaster, etc.) there is a power outage in the local power grid due to problems with power supply at the system level.

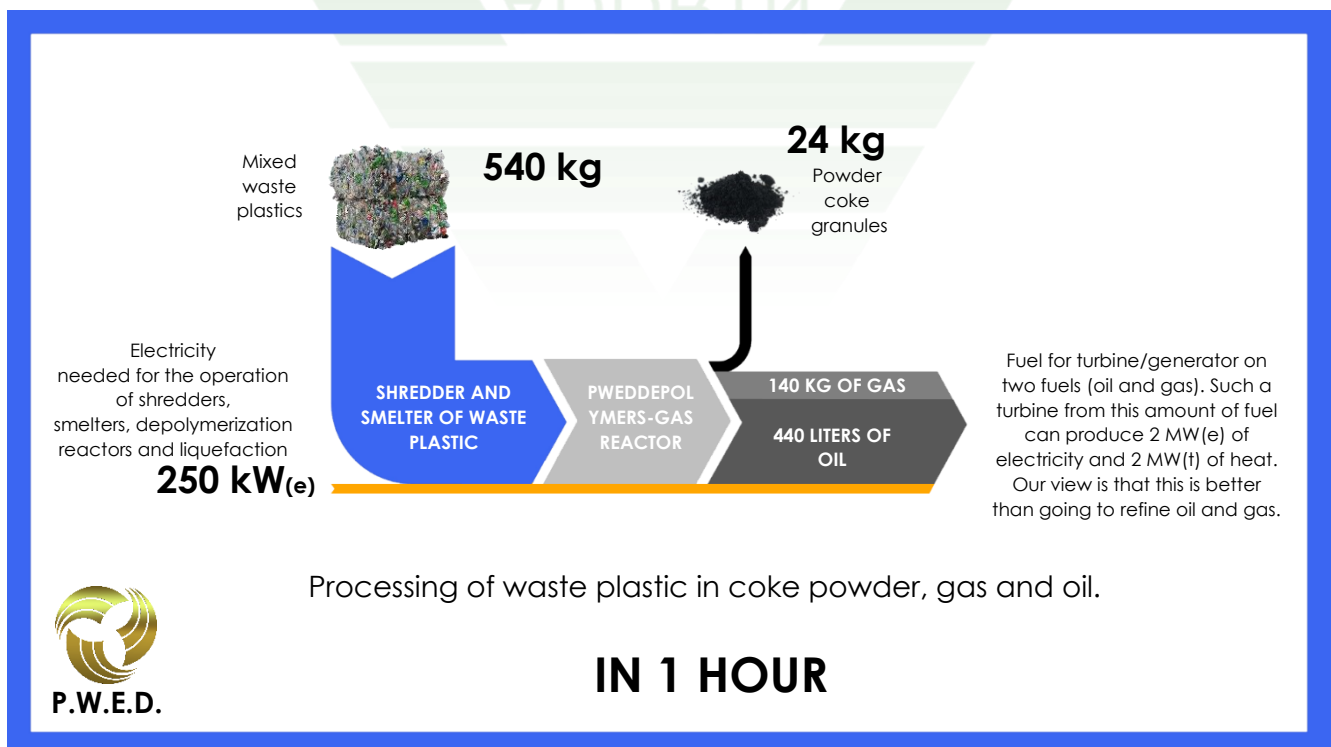
PWED is also suitable for charging electric vehicles (cars, buses, trucks, trains, and electric ferries/vessels) as well as to produce hydrogen by electrolysis of water.

The technology also produces large amounts of so-called waste heat during electricity generation. Thermal energy can also be used to power refrigerators and/or drying wood and food. It can be used in the food industry and other industries where heating or cooling is required or can be converted into additional electricity, and the still warm medium (water) can be used for aquaponic production of food (fish and vegetables) in indoor and environmentally independent systems that do not need artificial fertilizers and pesticides.

PWED variants - 1-hour scenario

PWED Power Plant (PPP)

PPP is a basic PWED kit that is intended to work as a kind of power plant on plastic waste. The PPP does not include equipment (turbine/generator) to produce electricity or equipment to produce electricity from waste heat. This is done because the price of a turbine/generator varies from country to country due to the policy of the turbine/generator manufacturer and because some countries need heat from the cooling system of the turbine/generator for heating in the heat grid or use heat in other ways.



PWED Food Production Power Plant (PPPF)

PPPF is an expanded basic PWED with a turbine/generator on two fuels (oil and gas) that, in addition to the production of electricity from oil and gas, have additional equipment to

produce additional electricity from the cooling system of the turbine / generator and heat the space and water to produce food (fish and vegetables) in the [aquaponic system](#). Food production in the aquaponic system is independent of environmental conditions and there is no need for pesticides and artificial fertilizers.

