Press release

Waldachtal, 25 January 2021

fischertechnik explains renewable energies

From electric vehicles to solar wobble figures

fischertechnik GmbH

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The fischertechnik Green Energy construction kit explains the principles of wind power and solar energy through 14 descriptive models. The models are suitable for children aged 9 and up and are available from specialist retailers from March for 109.90 Euro.

fischertechnik not only gives young modelmakers a glimpse into the future, but also into new worlds: A total of 343 building blocks can be used to build an eco home, for instance. A wind turbine produces energy which can generate electricity with a solar motor as a generator. Solar models on the roof of the home provide additional energy that is stored in a Goldcap capacitor. When there is a lack of sunlight the wind turbine supplies energy that can be used to operate an LED, simulating lighting in the house.

There are further small models in addition to this model, all of which can be powered with renewable energy. This includes a gang saw, which is still used in modern sawmills. The wheel starts spinning under the water tap and starts to put its functions into action. The solar motor of the water turbine model serves as a generator that generates electricity, causing an LED to light up.

A hairdryer that simulates wind causes the paper windmill to start spinning, which in turn propels a millstone. When the solar

motor is used as a generator, the homemade wind turbine's propeller is propelled by the wind until it lights up an LED. The wind turbine with its large propeller wings can also light up an LED when set up correctly.

One of the solar modules of the solar models generates electricity that can be used to power the motor. A jolly wobble figurine is bought to life with solar energy, while the solar heli spins its rotor blades and a fan provides fresh air. The solar motor of models such as a rotary table spins faster or slower depending on whether the solar modules are connected in series or parallel connections and whether the sun is shining or it's cloudy. A barrier can also be raised and lowered with the respective circuit using solar energy, similar to the original.

The solar-powered vehicles get electromobility going. The vehicle is set in motion equipped with a solar module. Once the energy is stored in the Goldcap it can be released in a controlled manner, causing the vehicle to move smoothly even when the sun isn't shining.

Green Energy can be combined with the H_2 Fuel Cell Car construction kit by fischertechnik. This construction kit provides an introduction to topics of the future such as fuel cells and hydrogen, which can be used to power a vehicle.

"Renewable energy is important to our future. With this construction kit we are providing the opportunity to learn about and playfully apply these subjects at home", explains Wilhelm Schoch, fischertechnik Managing Director. The company has therefore been offering renewable energy construction kits for several years.

Image caption:

<u>Image 1:</u> The fischertechnik Green Energy construction kit explains how renewable energies such as wind power work.

<u>Image 2:</u> The eco home contained in the fischertechnik Green Energy construction kit illustrates the interaction of renewable energies.

Images: fischertechnik

The fischer Group of Companies

The fischer Group of Companies, headquartered in Waldachtal in Germany's northern Black Forest, generated sales of 872 million euro in 2020 with a worldwide staff of 5,200 employees. The family-owned company operates 50 subsidiaries in 38 countries and exports to more than 120 countries. It includes the five divisions: fischer fixing systems, fischer Automotive, fischertechnik, fischer Consulting and LNT Automation

fischer fixing systems is the technological market leader in key areas of fixing technology. fischer offers products that deliver technical perfection to a wide range of customers, from do-it-yourselfers to tradespeople to key account partners.

fischer Automotive manufactures high-quality parts for vehicle interiors. The company is highly competent in the plastics processing segment and is an important partner for the automotive industry. Its range of products includes air vents, cup holders, trays and multi-function components.

With its construction kits, fischertechnik is active in both the toymaking and the educational sector. fischertechnik is one of the last remaining toy makers to exclusively develop and produce in Germany.

fischer Consulting evolved from the competence developed in the company itself, which includes the fischer ProcessSystem with its central aim of permanent improvement for the ultimate benefit of the customer. fischer Consulting advises small and medium-sized businesses, government agencies and major companies on their path towards lean and efficient processes.

LNT Automation develops and manufactures custom electronic solutions. The company also develops, produces and distributes custom and capacitive touch systems such as multi-touch solutions made of glass and the corresponding controller units. All electronics are manufactured in-house.

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