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THIRD INDUSTRIAL REVOLUTION TRANSPORT SERVICES DIALOGUE WITH DIDIER LEROY, PRESIDENT & CEO OF TOYOTA MOTOR EUROPE

How can an international car manufacturer contribute to the transformation of transport services in the 3rd industrial revolution? TOYOTA sees itself not only as a car maker but more as a mobility manufacturer.

Pioneer in hybrid technology, the company's first hybrid car was introduced in 1997 (the year of the Kyoto protocol) as a strong message to an increasingly eco-minded society. Despite public skepticism and after a slow beginning, hybrid technology proved to be a huge success for TOYOTA. The company has sold more than 4.5 million hybrid vehicles since 1997. Being a pioneer in hybrid technology gave TOYOTA a huge cost advantage over its competitors. In contrast to a purely electric vehicle, hybrids are affordable and consumers do not have problems with autonomy. Furthermore, fuel consumption is estimated to be at 50% less than a conventional combustion-engine car of the same size and performance. With the upcoming plug-in version, the hybrid is no longer a transition technology, it will be "the right car" for the next decade. It offers an electric drive range of approx. 25 km which corresponds to the average distance that 75% Europeans drive every day. Moreover, the car is rechargeable at an ordinary power outlet and much cheaper than a pure electric car.

TOYOTA plans to introduce to the market in the long term future, the fuel cell hybrid vehicles (FCHV) which represents the ultimate technology, as these vehicles will be able to function with hydrogen at zero emissions. However, hydrogen vehicles require developing the appropriate infrastructure.

The events of the Tohoku earthquake in 2011 brought TOYOTA to rethink its role in the 3rd industrial revolution. After the disaster, when many households were cut from electricity, people started using their hybrid vehicle's battery as a source of energy-electricity for their homes! TOYOTA then created the vision of a smart grid network in which "smart" cars, houses and production plants interact with the help of modern information technology. The goal is to manage the use of energy in an efficient way in order to reduce overcapacity and peak- level requirements. TOYOTA cooperates with IT companies like INTEL and MICROSOFT. A first prototype is being built in Japan, with the so called "F-Grid" system wherein the production plant is at the center of local energy management.

In addition to hybrid technology and revolutionary energy management, urban mobility is another key issue for TOYOTA. While efficient public transportation plays an increasingly important role, the problem of the "last kilometer" remains. The term "last kilometer" refers to the distance one needs to cover for example, from a subway stop to the final destination, such as the home. A car-sharing system using small electric vehicles could represent a solution to this problem.

Mr. LEROY concluded with the words that TOYOTA is proud to be part of this 3rd industrial revolution.