

50 SOLUTIONS FOR THE CLIMATE

LOW-CARBON ELECTRICITY AND RENEWABLE ENERGY

## Flexible nuclear generation to foster the development of renewable energy (cont.)

When the nuclear fleet is thus able to "modulate" generation (see diagram on previous page), it can serve as a low-carbon alternative to the fossil-fired capacity that is widely employed around the world. Fossil-fired plants can adapt production, but they emit large volumes of CO<sub>2</sub>. Modular nuclear is also an alternative to the massive use of energy storage, which has not yet reached technological maturity. It can also supplement hydropower, which produces little CO<sub>2</sub> and is very flexible. Hydro is therefore widely used to adapt electricity generation to variations in consumption and production, but it is not sufficiently available in France (despite the country's large hydroelectric fleet) or in many other countries to be sufficient to adapt production by itself.





