

# V4. the Visegrád Group

## Czech Republic, Hungary, Poland and Slovakia

### Nuclear sector overview of V4 countries

05

nuclear power plants

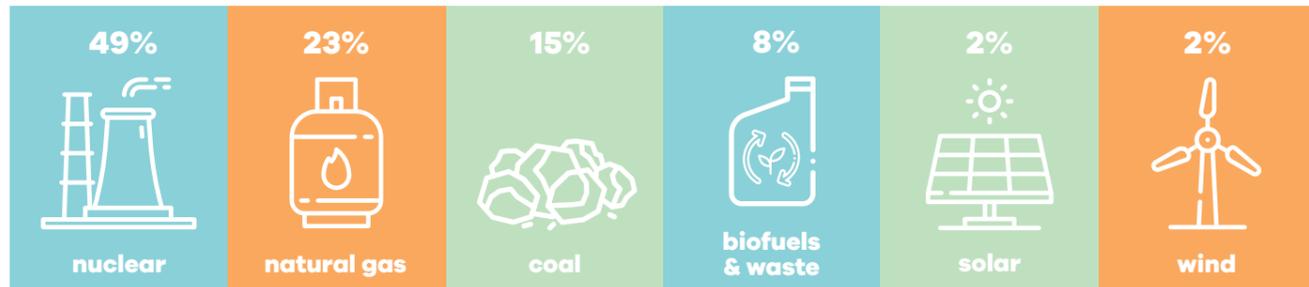
14

reactors in operation

02

nuclear reactors under construction

### Generation mix in Hungary



### Nuclear facts on V4



Czech utility ČEZ plans to construct two new reactors at its Dukovany nuclear power plant

2033

Poland plans to build the country's first nuclear plant by 2033, and five more are due to follow by 2043



Slovenské elektrárne is a leading heat supplier utility in Slovakia, and the only in Europe to supply heat from nuclear reactors directly to homes

# Viewpoint on Hungary

## Nuclear power is the key factor for the security of electricity supply

Ensuring energy sovereignty, secure energy supply at reasonable costs and the decarbonization of energy production are the three main pillars of the Hungarian energy policy.

According to the National Energy and Climate Plan most of the electric power generated in Hungary will originate from nuclear energy and renewable sources – mainly from solar installations. These carbon free technologies do not replace or exclude each other but are complementary and mutually supportive. The operational lifetime of the existing four units of Paks NPP has been extended by 20 years, so they will operate till the mid of 2030s. To maintain the current high share of nuclear energy in the domestic electricity production for longer period two new NPP units are under construction.

Nuclear power is the largest source in Hungarian energy mix, its share around 50% in the domestic production. Further decarbonization of the energy sector is inconceivable and unfeasible without nuclear energy. The country's climate protection policies are realistic and based on the current international environmental protection trends in line with Paris Agreement on Climate Change. The implementation of these policies relies on feasible measures with expected results afforded by current available technologies. The measures focus on the carbon neutral power generation and transport electrification.

According to the forecasts the need for electric energy will steadily increase in the next decades, some old power stations on fossil fuel will retire and the currently high electricity import dependency should be reduced. Therefore, new generating capacities are required. One of the components of the new capacity mix is the additional two units of 1200 MW at the Paks NPP, which maintains the current role of the nuclear power in medium- and

long-term perspective. The design solutions of the new units meet all the up-to-date safety requirements and has all the features of the generation 3+ units.

In climate change context the nuclear electricity has several advantages, it emits, during the whole fuel cycle, very limited green-house gases and other air pollutants, the land required to produce electricity is significantly lower than other energy sources, nuclear is responsible for a very small amount of the total hazardous waste that is produced by society across.

The excellent operation results of the existing four units show the high nuclear safety culture in Hungary. The implemented safety enhancement programs, the capacity uprate, and the implementation of the 15 months fuel cycle are the good examples to demonstrate the high technical level and innovation capabilities of Hungarian nuclear engineering experts. The technical culture and specific knowledge in nuclear field will be maintained and transferred to the next generation of experts by implementing comprehensive training and educational programs with participation of leading universities and scientific centers.

by Hungarian Nuclear Forum



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