

Nuclear Energy in Finland - the complete lifecycle

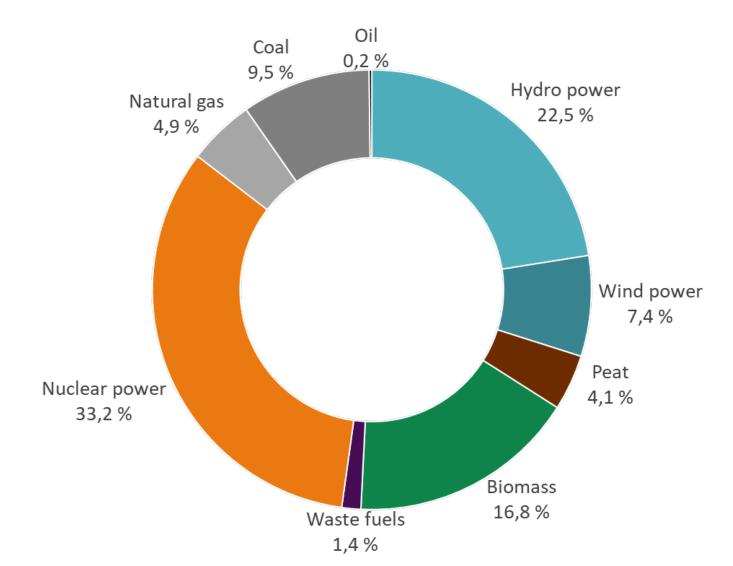


Finnuclear Association?

- 74 members (and counting)
- Supporting role for nuclear industry in Finland
 - $\circ \, \text{Training}$
 - Networking
 - Advocacy and promotion
 - o Information services
- A contact point for international actors



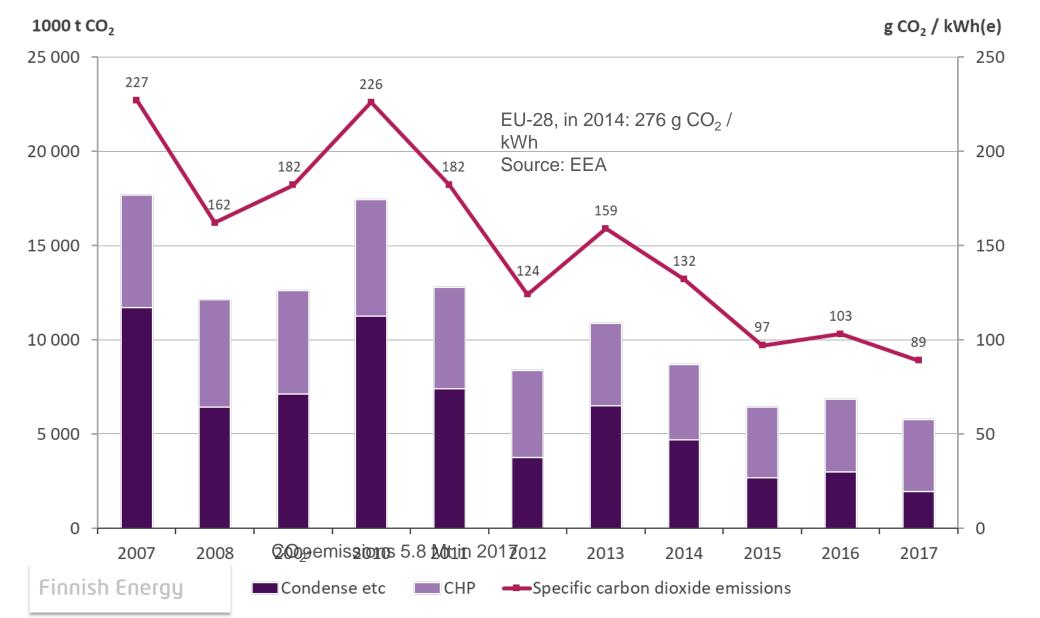
Power production in Finland 2017



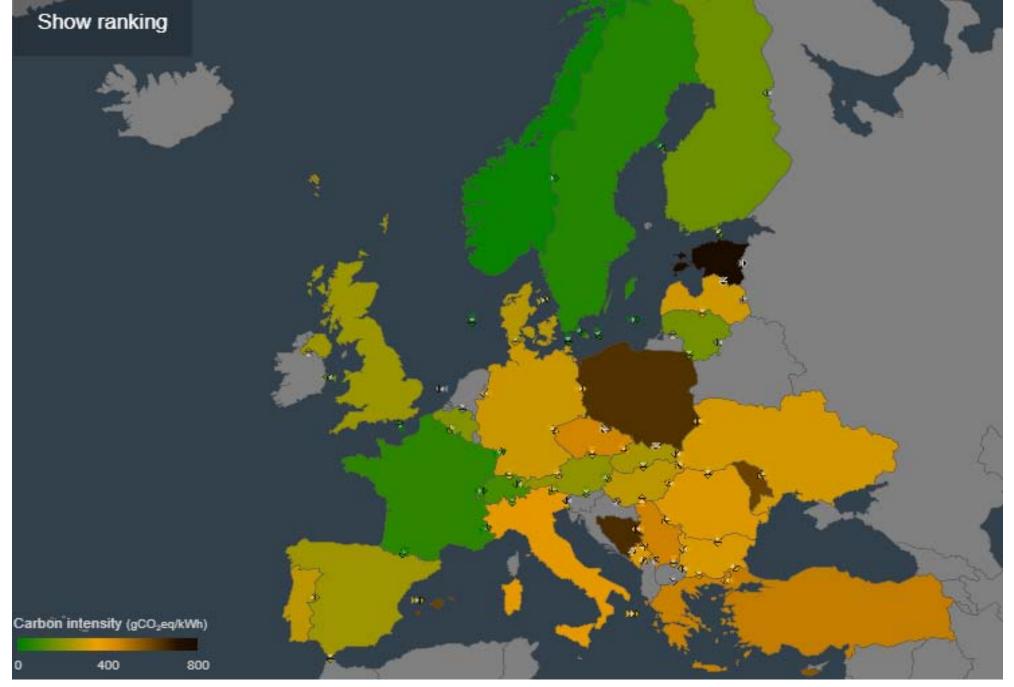
Renewables: 47 % Carbon dioxide free: 80 % Domestic: 52 %



CO2-emissions of power production



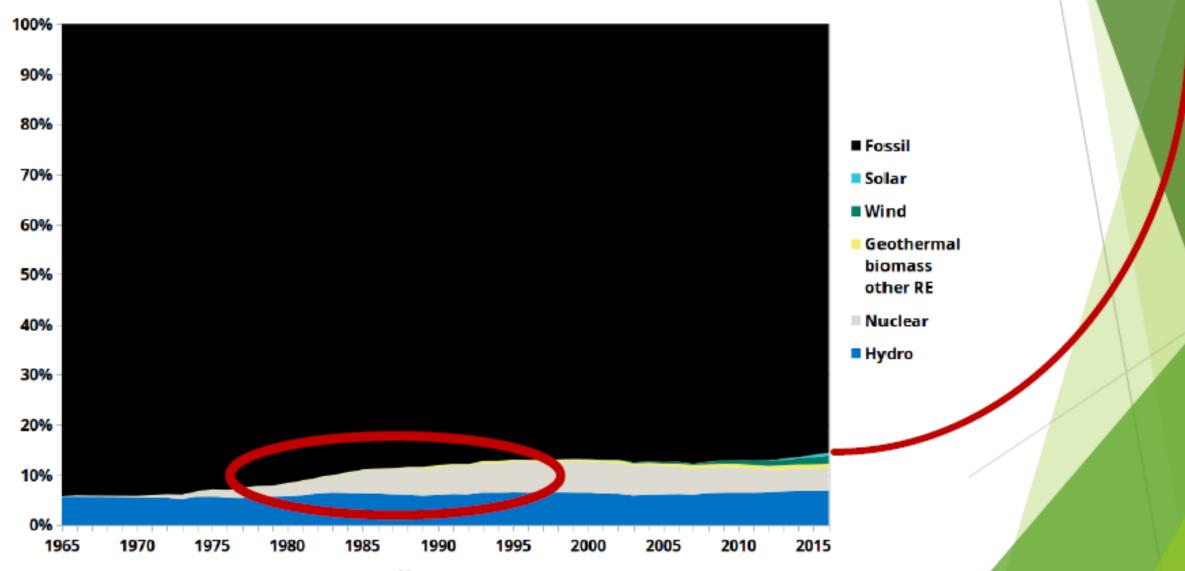
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Source: https://www.electricitymap.org

Global energy consumption 1965-2016

Source: BP Statistical Review of World Energy 2017



Year

Coal use for energy to be prohibited in Finland one year ahead of schedule, in 2029

FINLAND / CREATED: 11 APRIL 2018



The smokestacks of the Hanasaari Power Plant, a coal-fired cogeneration plant on Hanasaari, Helsinki, on 22 January, 2016. Source: Helsinki Times, April 11th 2018

What about heat?

Heat represents almost half of EU final energy use, with a total annual demand of **around 6,000 TWhs**.



Most of this heat is produced by burning fuels

Nuclear District Heat with Small Modular Reactors

Finnish cities might consider SMRs for district heating

15 December 2017

A number of Finnish cities have received political initiatives to evaluate the feasibility of using small modular reactors (SMRs) instead of fossil fuels to provide district heating, according to Energy for Humanity. A recent study looked at completely decarbonising electricity, transport and heating in Helsinki through the use of small, advanced reactors.

Most of the district heating in Finland is produced by burning coal, natural gas, wood fuels and peat, said the non-profit organisation, which is funded by philanthropic donations and advocates for climate action and energy access. It noted that while many Finnish cities have progressive climate policies and goals, they have struggled to decarbonise heating and liquid fuels.

WNA Links

- Nuclear Power in Finland
- Nuclear Process Heat for Industry
- Small Nuclear Power Reactors
- The Many Uses of Nuclear Technology

Source: World Nuclear News, Dec 15th 2017

www.finnuclear.fi

Nuclear Forum 2019



5–7.2.2019 Helsinki, Finland

- NNF 2019 CONFERENCE
 - · Role of nuclear worldwide
 - Nuclear safety
 - Nuclear new builds
 - NPP lifetime extensions
 - Nuclear waste management and decommissioning
 - Advanced technologies and SMRs
- EXHIBITION
- BUSINESS MEETINGS
- VISITS