Posiva Oy, Finland
Constructing the world’s first Deep Geological Repository for spent fuel

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Mika Pohjonen
Posiva Oy

**Mission**
Safe and cost efficient final disposal of spent nuclear fuel for our owners

**Vision**
Forerunner in industrial final disposal of spent nuclear fuel

- Established in 1995
- Private company owned by Finnish NPP operators TVO and Fortum
- Turnover 67 M€ (2017)
Complete Nuclear Waste Management on one island – Olkiluoto, Finland

- **SPENT FUEL INTERIM STORAGE FACILITY**
  - Cooling of fuel assemblies removed from reactor building in water pools excavated in rock

- **DECOMMISSIONING WASTE REPOSITORY**
  - Space reservation for decommissioning waste

- **OPERATING WASTE REPOSITORY - VLI**
  - Final disposal of intermediate and low level waste

- **SPENT NUCLEAR FUEL REPOSITORY**
  - The underground research facility ONKALO™
  - Construction license for the final disposal facility was granted in 2015 and construction began in December 2016
Posiva's program has progressed already for 40 years

1978
Government's decision on timetable

1983
EIA-law into force

1994
Selection of Olkiluoto

2001
Construction of ONKALO™ and site confirmation studies in Olkiluoto

2012
Construction of disposal facilities

2015
Application for the operation license

Early 2020's
Construction license granted by the Government in 2015

Decision in principle by the Government and the Parliament

12.4.2018

Pohjonen Mika

159 Yes
3  No
37  Absent
Decisive arguments in Parliament

- “Aiming at final disposal is a better solution than just resorting to interim storing”

- “Option for retrievability of waste canisters must be maintained”

- “The present generation has to accept responsibility for nuclear waste”
Municipal veto-voting

- Vote in Eurajoki municipality council in 2000:
  - 20 YES
  - 7 NO
Local and national trust in 1999

Acceptance for repository in 1999

- Whole country
- Äänekoski
- Loviisa
- Kuhmo
- Eurajoki

Legend:
- Would accept
- Would not accept
- Don't know
Annual poll by the Finnish Energy association 1983 – 2016
Nuclear waste can be safely stored in a final repository in the bedrock of Finland – do you agree?

- Agree completely
- Somewhat agree
- Difficult to say
- Somewhat disagree
- Disagree completely

Year: 1983-2016

Poll Results:
- 2016: Agree completely: 12, Somewhat agree: 19, Difficult to say: 26, Somewhat disagree: 19, Disagree completely: 24
- And so on...

Graph showing percentage distribution for each year.
Three “shafts of success”

- Trust and transparency
  - It takes years to earn the trust, and only minutes to lose it – we do not risk this under any circumstances

- Independent and trusted authorities

- People’s own good, long experience of reliable, employing, tax-paying and transparent nuclear industry

Public acceptance of deep geological disposal of spent nuclear fuel
Posiva Solutions can offer a wide range of expert services for organizations engaged in nuclear waste management operations. With our experience you can save time and cost.