Sweden's goals for building new nuclear power plants

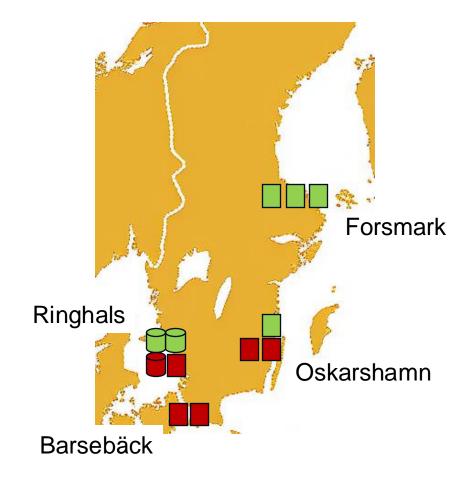
Fermi Energia's 6th Annual Conference 2025-02-05, Tallinn, Estonia

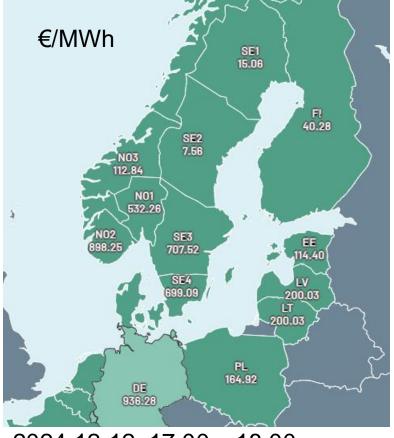
Carl Berglöf, National Nuclear New-build Coordinator

Inquiry assigned by the Ministry of Climate and Enterprise



Nuclear power in Sweden today



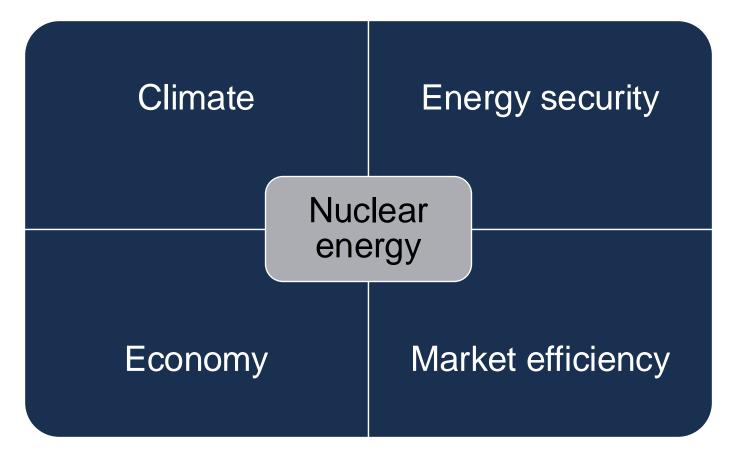


2024-12-12, 17:00 - 18:00

Source: Nordpool



Nuclear power – a central solution to several overarching society challenges





A new course for energy policy in Sweden

- "100% fossil free" electricity production
- Removed nuclear cap
- Targets for system planning
- New policy approved by Parliament
 - Includes Nuclear Roadmap





Roadmap for New Nuclear Power

- New nuclear capacity corresponding to two large-scale reactors by 2035
- A strong build-up of nuclear capacity to 2045
- A second nuclear program!



2025

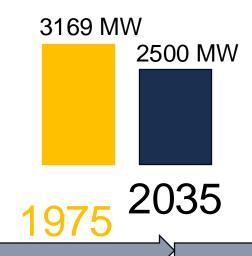
2045

10 000 MW



Roadmap for New Nuclear Power

- New nuclear capacity corresponding to two large-scale reactors by 2035
- A strong build-up of nuclear capacity to 2045
- A second nuclear program!







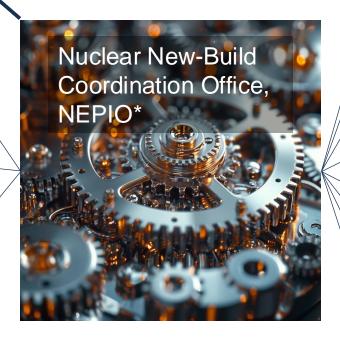
A coordinated approach to programme development

Government

Government Offices

State Authorities

Public Inquiries



- Effective communication
- Structured advice

Utilities

Investors

Industry and endusers

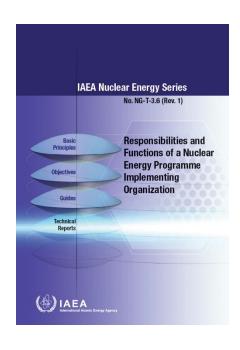
Vendors & Project developers

Supply chain

Municipalities

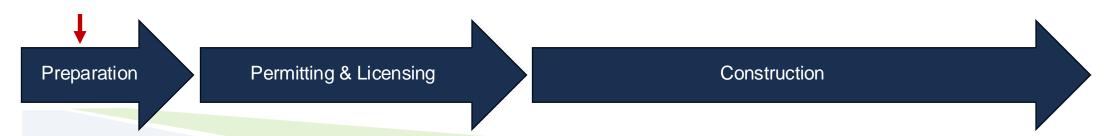
Academia

International contacts





Critical path to first grid connection



Promotional measures

- Financing model, state aid
- Electricity market development
- New authority instructions
- Credit guarantees
- Evaluation of possible sites
- Nuclear coordination function
- Skills, workforce & supply chain

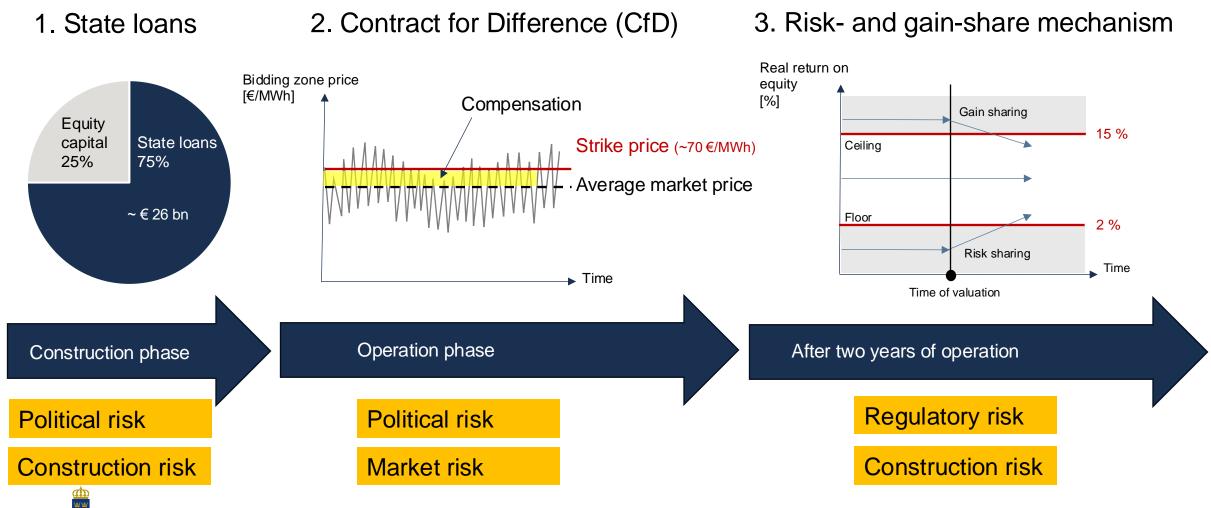
Regulatory measures

- Renewal of Environmental Act
- Renewal of Nuclear Act
- Renewal of nuclear licensing process
- Pre-licensing evaluation of new reactor designs
- Conditions for nuclear waste management
- Development of a Technical Support Organisation
- Enhancement of local permitting processes
- Skills & workforce

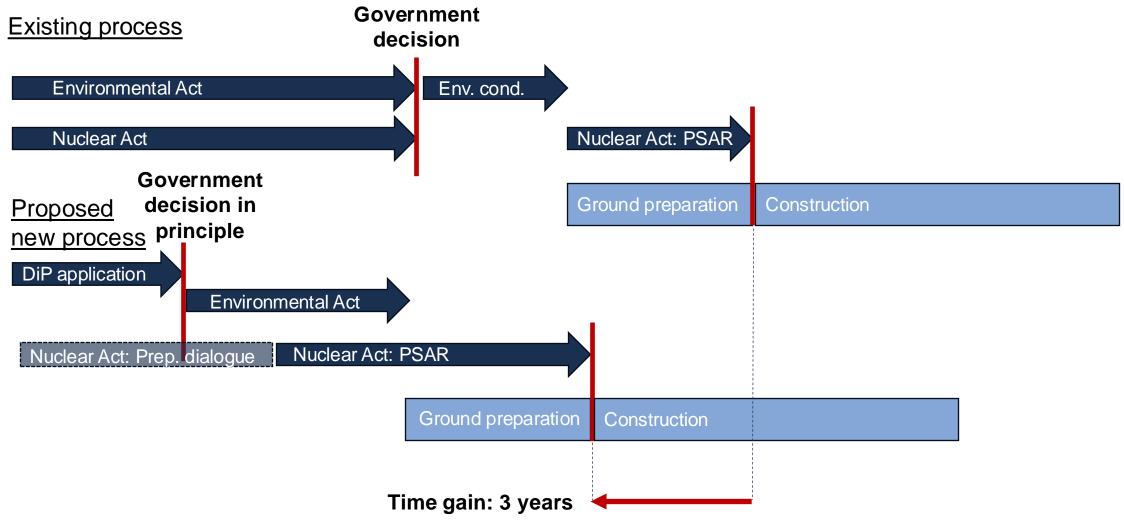


Proposed Financing Model (4-6 GW)

SWEDISH GOVERNMENT



Proposed new licensing process





Two interim reports published





En nationell samordnare för utbyggnad av KN 2024:01 Carl Berglöf +46 76 142 67 87 carl.berglof@regeringskansliet.se

Promemoria

2024-06-17 Komm2024/00450/KN 2024:01-1/

Klimat- och näringslivsdepartementet Finansdepartementet Arbetsmarknadsdepartementet Landsbygds- och nfrastrukturdepartementet

Interim report: The nuclear new-build coordinator's recommendations regarding the expansion of new nuclear

Introduction

Since I February 2024, the inquiry "A national coordinator for the expansion of nuclear power" (KN 2024:01, hereinafter referred to as the "nuclear newbuild coordinator" or "the inquiry") has evaluated the measures taken linked to the expansion of nuclear power in Sweden and whether these are sufficient in relation to the roadmap for new nuclear power presented by the cooperating parties within the Tido Agreement and adopted by the Swedish Parliament as part of the new energy policy framework! The Government has initiated, and in some cases implemented, several measures and investigations to create clearer and more efficient conditions for new nuclear power in Sweden. The Government has also assigned a number of missions to authorities for the same reason. These efforts are summarised in Chapter 4. In Chapter 5, the nuclear new-build coordinator provides an assessment of the ongoing investigations in relation to the objectives of the roadmap.



2025-01-30 Komm2025/00090

En nationell samordnare för utbyggnad av kärnkraft KN 2024:01

+46 76 142 67 87 carl.berglof@regeringskansliet.se

Klimat- och näringslivsdepartementet Finansdepartementet Arbetsmarknadsdepartementer Landsbygds- och ifrastrukturdepartementer

Interim report 2: Report on the National Nuclear New-build Coordinator's mission regarding the expansion of nuclear power

Summary

The National Nuclear New-build Coordinator's second interim report provides a clarified recommendation on how a programme organisation may be designed. The coordinator recommends the establishment of a stateowned company that invests in new nuclear power capacity. By investing in several projects that get financial support from the state's financing model, lock-in effects regarding learning can be avoided. In this way, a higher costefficiency and a more responsible use of tax-payers money can be achieved.

The coordinator also proposes regional cooperation with neighbouring

The seport also provides a follow-up of activities of the National Nuclear New-build Coordinator since the previous interim report (June 2024), a summary of ongoing activities for new nuclear power and an assessment of the possibility to fulfil the goals in the Swedish Government's coadmap for

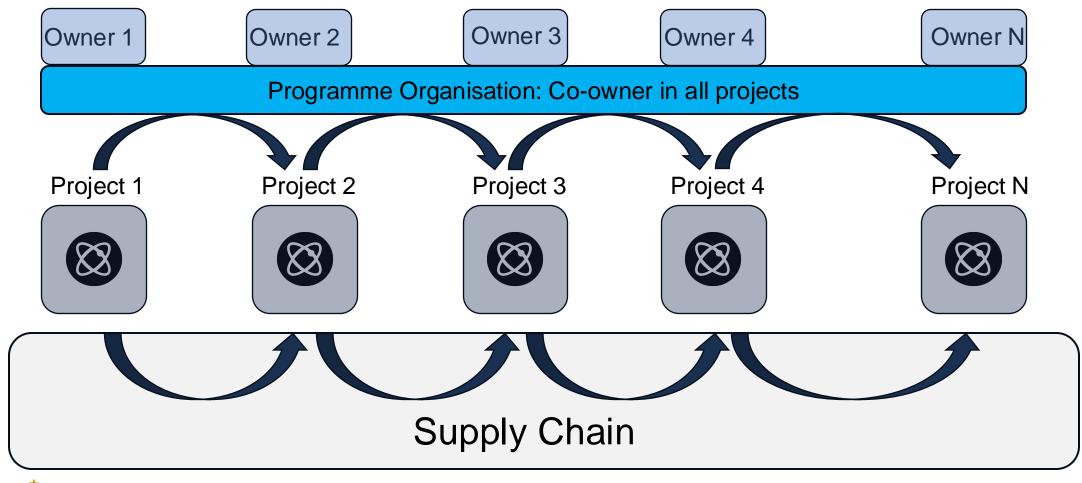
In this interim report, the public inquiry "A national coordinator for the expansion of nuclear power" (hereinafter referred to as the "National Nuclear New-build Coordinator" or "the inquiry") gives an overview on the

arms of reference (in Owedish).



Regeringens proposition 2023/24:105, Energipositizens Längelikiga Inriktning, 14 mars 2024.

A missing piece: Knowledge management





Nordic-Baltic Nuclear Hub

- Supply chain
- Competence development



Al-generated photo

