



# **Webinar on Repurposing sites of retired fossil plants with advanced nuclear reactors for the clean energy transition**

**Virtual Event**

**31 May 2022**

**EVT No. 2202170**

**Joining Information:**

**<https://iaea.webex.com/iaea/j.php?RGID=r0be572b4d7c3e3f2186bf5657d321cd0>**

## **Information Sheet**

### **Introduction**

Many IAEA Member States are considering, planning or actively working to introduce nuclear power into their energy mix with the objective to establish sustainable and low-carbon energy systems while reducing reliance and use of fossil fuels. An idea to use the sites of retired fossil-fuelled power plants for new nuclear power plants with advanced reactor is an attractive strategy that enables continuation of power production for the customers, at the same time mitigating the climate change. Nuclear energy is uniquely positioned to redirect skilled workers from the retired fossil power industry to new nuclear plants preserving steady power generation. Professional communities would benefit from this transition with new job opportunities. Furthermore, usable infrastructure such as administrative offices, railway and road connections and warehouses can be adapted quickly and efficiently. Numerous companies developing advanced reactors such as small modular reactors (SMRs) find retired fossil-fuelled power plants well-suited sites, thanks to the off-site construction, greater power use adaptability, existing grid connections for the same capacity, and most importantly the existing heat sinks. There are however also many concerns and challenges in this clean energy transition scenario, such as issue of the safety, emergency

preparedness and responses, nuclear waste disposal, cost etc., which this concept would need to address to become competitive and viable.

## **Objectives**

This webinar is seeking to address the opportunity for nuclear power plants to transform carbon producing power sites to clean energy, while illustrating some case studies to serve for reflection on how retiring fossil power plants could be replaced by advanced nuclear power plants and their respective economic benefits, challenges and approaches adopted by key organisations to respond to project needs.

The event aims to provide an international, cross-cutting forum to discuss and foster cooperation on issues related to gradually phasing-out the use of fossil fuels for power production and to improve awareness and strengthen knowledge and understanding within Member States on how available infrastructure for fossil power plants and personnel could aid to lower capital costs of nuclear deployment while supporting low carbon future.

## **Target Audience**

The webinar is intended to a broad audience including energy professionals, advanced nuclear reactor technology developers and stakeholders interested to learn more and engage in a discussion on nuclear opportunities and challenges in relation to repurposing retired fossil plants with advanced nuclear power plants.

## **Working Language(s)**

English

## **Expected Outputs**

The expected outputs are:

- Information exchange between international experts on the topic of the webinar
- Fostering dialogue between various stakeholders and discuss challenges of repurposing sites of retired fossil plants with advanced nuclear reactors

## **Participation and Registration**

The participation will be approved through an online registration.

## **Expenditures and Grants**

No registration fee is charged to participants.

## **IAEA Contacts**

### **Scientific Secretary:**

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary and correspondence on other matters related to the event to the Administrative Secretary.