



THE ROLE OF THE NATIONAL ACADEMIES IN NUCLEAR ENERGY POLICY IN SINGAPORE

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Nuclear Issues and Studies in Singapore - Research, Safety & Preparedness
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OECD NUCLEAR ENERGY AGENCY (2010)

PUBLIC ATTITUDE TO NUCLEAR POWER

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Selected Key Issues for Policy Makers:

- There is a clear correlation between knowledge and support ...
- Public opinion on nuclear energy seems to change slowly and is not normally volatile ... dramatic events can cause a rapid drop in public support, which recovers slowly.
- There are large sections of the public with no firm views for or against nuclear energy ... the attitudes of this middle ground will be critical.
- When the climate change benefits of nuclear energy are explained, the support for nuclear energy ... increases significantly. ... if the radioactive waste disposal issue was satisfactorily resolved, support would again significantly increase.
- The public gains most of its information on nuclear energy from the media, and that **scientists are the most trusted group** while national governments in general are less trusted.

WHY THE NATIONAL ACADEMY?


- Most scientists are **government employees** or receive some government funding in their day job
- A **national academy** is an organizational body, usually operating with some state financial support and approval, that co-ordinates scholarly research activities and standards for academic disciplines, most frequently in the sciences but also the humanities. The extent of official recognition of national academies varies between countries. cf. NAS (US), Royal Society (UK), CAS (PRC)
- General consensus amongst learned academies that national academies need to adhere to certain **criteria**:
 - The fellowship is elected, on the basis of excellence, by existing fellows
 - The number of fellows is restricted either to a total number
 - The governance of the academy is democratic and “bottom up”. The fellowship is the ultimate source of the academy’s authority
 - The academy is **independent** of government, industry and professional associations. Most, if not all, academies derive some financial support from some or all of these other organizations but this support needs to be given in a manner that does not compromise the academy’s independence.

Nuclear energy - the future climate

01 June 1999

There is a strong case for acting to mitigate the threat of drastic climate change associated with unrestrained increases in emissions of greenhouse gases, particularly CO₂. Business as usual in electricity generation is not a sane option. All possible approaches must be considered including using less electricity, using technologies based on renewable sources, and finding ways to prevent CO₂ reaching the atmosphere, as well as exploring the nuclear option. If the latter is to be kept open it is essential to win back public confidence in this option.

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UK Government's White Paper on Energy

12 February 2003

Before the publication of the Government's White Paper on Energy (February 2003) the Royal Society urged the Government to show political courage by spelling out clearly how nuclear power, renewables and energy efficiency measures could best contribute to UK's greenhouse emission reductions.

The statement emphasises the need for a clear strategy for nuclear energy, adequate, secure and affordable energy, and the risks posed by waste products from nuclear power.

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 **Statement**
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“If the Government does change its present policies on nuclear energy, the Royal Society believes that plans to build any new nuclear power stations must be accompanied by a strategy for dealing with the long-term storage and disposal of the radioactive waste that they will produce.

Strategy options for the UK's separated plutonium

21 September 2007

This report outlines the health, environmental and security risks associated with the plutonium stockpile and how they might be managed. We stress the urgent need for the Government to develop and implement a strategy for the management of separated plutonium as an integral part of its energy and radioactive waste policies. Failure to do so could result in significant avoidable costs and security risks.

We suggest actions that the Government should undertake now to reduce the risks and to prepare for the future. We also assess specific future options depending on whether a new generation of nuclear power stations is constructed in the UK in the near future. The status quo of continuing to stockpile a very dangerous material is not an acceptable long-term

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 **Full report**
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Science of nuclear safety post-Fukushima



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Communiqué on Nuclear Power in France

On January 10, 2012, the Academy assessed the nuclear challenges facing France 10 months after the major accident at Fukushima. What lessons are to be drawn with respect to the future of French nuclear power? What is the solution for nuclear waste disposal? What is the impact on health? What are the economic effects of the various strategic options? These are the topical questions to which the studies undertaken by the Academy since March, 2011 - in the framework of its "Japan Solidarity Program" - have contributed¹.



SINGAPORE NATIONAL ACADEMY OF SCIENCE

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Established in 1977, the SNAS endeavours to promote the advance of science and technology in Singapore. SNAS also represents the scientific opinions of its members. From the outset, SNAS was conceived of as an umbrella organization which would not only have its own series of programmes but would also oversee the activities of its constituent societies. Since 2011, SNAS has begun to elect her own fellows.

Science Research



Science



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[Singapore National Institute of Chemistry \(SNIC\)](#)
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[Singapore Society for Biochemistry and Molecular Biology \(SSBMB\)](#)
[Singapore Society for Microbiology and Biotechnology \(SSMB\)](#)
[Singapore Mathematical Society \(SMS\)](#)
[Singapore Institute of Statistics \(SIS\)](#)
[Science Teachers Association of Singapore \(STAS\)](#)
[Materials Research Society Singapore \(MRSS\)](#)

THE ROLE OF *SNAS* IN NUCLEAR ENERGY POLICY IN SINGAPORE

- SNAS needs to build expertise on nuclear energy and related policy matters, e.g. leverage expertise in SNAS Fellows and constituent societies
- SNAS needs to engage in active research in nuclear energy policy, e.g. MTI *Nuclear Policy Research Programme (NPRP)*
- SNAS needs to engage nuclear experts in Singapore and internationally to study nuclear energy issues in the Singapore context
- SNAS needs to publish policy papers, briefs, statements; be involved in public education and discourse; and build trust with government