

Why is the UK government so infatuated with nuclear power?

As the nuclear option looks less and less sensible, it becomes harder to explain Whitehall's enthusiasm. Might it be to do with the military?

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Artist's impression of Hinkley Point C nuclear power station. The plan is a 'risky and expensive project' with uncertain benefits, the National Audit Office (NAO) warned. Photograph: EDF Energy/PA

Against a worldwide background of declining fortunes for nuclear power¹, UK policy enthusiasm continues to intensify.

Already pursuing one of the most ambitious nuclear new-build agendas in the world, Britain is seeking to buck 50 years of experience to develop an entirely new and untested design of small modular reactors (SMRs).

In 2016, then energy and climate secretary, Amber Rudd, summed up the government's position:

*"Investing in nuclear is what this government is all about for the next 20 years"*².

Despite unique levels of long-term policy support³, this nuclear new-build programme is severely delayed, with no chance of operations beginning as intended "significantly before 2025"⁴.

Costs have mushroomed⁵, with even government figures showing renewables like offshore wind to already be far more affordable.

With renewable costs still plummeting⁶, global investments in these alternatives are now already greater than for all conventional generating technologies put together.

With worldwide momentum so clear, the scale of UK nuclear ambitions are an international anomaly.

¹ <https://www.worldnuclearreport.org/IMG/pdf/20170912wnsr2017-en-lr.pdf>

² https://www.youtube.com/watch?v=_tsBkVjRIIq

³ <http://blogs.sussex.ac.uk/sussexenergygroup/2015/02/17/the-politics-of-the-uk-nuclear-renaissance/>

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf

⁵ <https://www.thetimes.co.uk/article/hinkley-point-cost-could-soar-to-50bn-6brmph9q7>

⁶ <https://www.theguardian.com/environment/2017/jun/06/spectacular-drop-in-renewable-energy-costs-leads-to-record-global-boost>

Unswerving British nuclear support contrasts sharply with obstructive national policy on other technologies. In 2015 various strategies supporting renewables and energy efficiency were abandoned⁷, with the cheapest UK low-carbon power (onshore wind), effectively halted.

The consequences of these cuts are now clear. The output of community energy projects has fallen by 99.4%⁸. National investment in renewables has halved.

Meanwhile, UK industrial strategy continues to prioritise nuclear⁹. Nuclear R&D gets 12 times as much funding as renewables¹⁰ in the Department for Business, Energy and Industrial Strategy's "Energy Innovation Programme".

Instead of considering alternatives to spiralling nuclear costs, the UK government is looking to accommodate them with entirely new models of public financing¹¹. It seems clear that – for some undeclared reason and regardless of comparative costs or global trends – Britain simply must have new nuclear power.

The depth of this Whitehall bias¹² creates a challenging environment for reasoned debate over British energy policy. To many, it seems scarcely believable that UK plans are so massively out of sync with current trends. The sheer weight of UK nuclear incumbency has successfully marginalised the entirely reasonable understanding that – like many technologies before it – nuclear power is simply going obsolete.

With direct reasons for the UK's eccentric national position still unstated¹³, we should pay attention to body language. Here, clues may be found in the work of the *National Audit Office (NAO)*¹⁴. Its 2017 report of 2017¹⁵ points out serious flaws in the economic case for new nuclear – highlighting "unquantified", "strategic" reasons why the UK still prioritises new nuclear despite the setbacks and increasingly attractive alternatives. Yet the NAO remains uncharacteristically unclear as to what these reasons might be.

An earlier NAO report may shed more light¹⁶.

Their 2008 costing of military nuclear activities states:

"One assumption of the future deterrent programme is that the United Kingdom submarine industry will be sustainable and that the costs of supporting it will not fall directly on the future deterrent programme."

⁷ <https://www.theguardian.com/environment/2015/jul/24/the-9-green-policies-killed-off-by-tory-government>

⁸ <https://www.brightonenergy.org.uk/2018/01/new-community-energy-projects-fall-99-4-fit-cuts-ofgem/>

⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf

¹⁰ <https://www.gov.uk/guidance/energy-innovation>

¹¹ <https://www.ft.com/content/5bd0f8e6-f240-11e7-ac08-07c3086a2625>

¹² <http://www.michaelmeacher.info/weblog/2011/04/how-is-this-nuclear-obsession-explained/>

¹³ <https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy> Consult responses/Response to BEIS consultation on Helm review.pdf

¹⁴ <https://www.nao.org.uk/wp-content/uploads/2017/06/Hinkley-Point-C.pdf>

¹⁵ <https://www.nao.org.uk/wp-content/uploads/2017/06/Hinkley-Point-C.pdf>

¹⁶ <https://www.nao.org.uk/wp-content/uploads/2008/11/07081115.pdf>

If the costs of keeping the national nuclear submarine industry in business must fall elsewhere, what could that other budget be?

Although unstated, by far the most likely source for such support is a continuing national civil nuclear programme¹⁷. And this where the burgeoning hype around UK development of SMRs¹⁸ comes in.

Leading designs for these reactors are derived directly from submarine propulsion¹⁹. British nuclear submarine reactor manufacturer *Rolls-Royce* is their most enthusiastic champion. But, amid intense media choreography²⁰, links between SMRs and submarines remain (aside from reports²¹ of our own work²²) barely discussed in the UK press.

This neglect is odd, because the issues are very clear. Regretting that military programmes are no longer underwritten by civil nuclear research, a heavily redacted 2014 MoD report expresses serious concerns over the continued viability of the UK nuclear submarine industry²³. And *Rolls-Royce* itself is clear that success in securing government investment for SMRs would “relieve the Ministry of Defence of the burden of developing and retaining skills and capability”²⁴ for the UK’s military nuclear sector.

Other defence sources are also unambiguous that survival of the British nuclear submarine industry depends on continuation of UK civil nuclear power²⁵. Many new government initiatives focus intently on realising the military and civil synergies²⁶.

Some nuclear enthusiasts have called this analysis a conspiracy theory²⁷, but these links are now becoming visible.

In response to our own recent evidence²⁸ to the UK Public Accounts Committee, a senior civil servant briefly acknowledged the connections²⁹.

And with US civil nuclear programmes collapsing³⁰, the submarine links are also ³¹.

¹⁷ http://sro.sussex.ac.uk/63568/1/_smbhome.uscs.susx.ac.uk_pj55_Documents_ALL JOURNAL ARTICLES_Cox et al_2016 Exploring the intensity of UK nuclear commitments.pdf

¹⁸ <https://www.ft.com/content/bcffe4d2-2402-11e6-9d4d-c11776a5124d>

¹⁹ <http://www.cityam.com/242623/rolls-royce-shortlisted-to-build-fleet-of-baby-nuclear-reactors>

²⁰ <https://www.theguardian.com/business/2017/dec/03/mini-nuclear-power-stations-uk-government-funding>

²¹ <https://www.theguardian.com/uk-news/2017/oct/12/electricity-consumers-to-fund-nuclear-weapons-through-hinkley-point-c>

²² <https://www.theguardian.com/news/2017/dec/21/hinkley-point-c-dreadful-deal-behind-worlds-most-expensive-power-plant>

²³ http://www.heraldscotland.com/news/15670162.Trident_submarine_plans_facing_a_perfect_storm_of_problems_says_MoD_report/

²⁴ <https://www.rolls-royce.com/-/media/Files/R/Rolls-Royce/documents/customers/nuclear/a-national-endeavour.pdf>

²⁵ <https://sustainablesecurity.org/2017/04/12/is-trident-influencing-uk-energy-policy-part-2/>

²⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/665473/The_Nuclear_Sector_Deal_171206.pdf

²⁷ <https://thebreakthrough.org/index.php/voices/britains-civilian-nuclear-program-is-not-a-stealth-military-program>

²⁸ <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/business-energy-and-industrial-strategy-committee/leaving-the-eu-implications-for-the-nuclear-industry/written/71514.pdf>

²⁹ <https://www.theguardian.com/uk-news/2017/oct/12/electricity-consumers-to-fund-nuclear-weapons-through-hinkley-point-c>

³⁰ <http://www.dw.com/en/us-nuclear-reactor-project-collapses/a-39915012>

³¹ <https://static1.squarespace.com/static/58ec123cb3db2bd94e057628/t/59947949f43b55af66b0684b/1502902604749/EFI+nuclear+paper+17+Aug+2017.pdf>

Nuclear submarines are evidently crucial to Britain's cherished identity as a "global power"³². It seems that Whitehall's infatuation with civil nuclear energy³³ is in fact a military romance.

So why does the UK debate on these issues remain so muted? It is now beyond serious dispute that nuclear power has been overtaken by the extraordinary pace of progress in renewables.

But – for those so minded – the military case for nuclear power remains.

In a democracy, it might be expected that these arguments at least be tested in public. So, the real irrationality is that an entire policy arena should so comprehensively fail to debate such crucial issues.

In the end, all technologies become obsolete.

If we are not honest about UK civil nuclear policy, the danger is that British democracy may go the same way.

Read more

- EDF could build second nuclear plant 'for 20% less than Hinkley Point'
- Foreign companies flock to build nuclear plants in the UK

³² <https://www.theguardian.com/uk-news/2016/feb/11/trident-the-british-question>

³³ <https://www.thefifthestate.com.au/energy-lead/energy/the-mystery-of-britains-love-affair-with-new-nuclear>