Nuclear Subs and Rolls Royce's Silver Bullet

Politicians everywhere seem to boundlessly attracted to hubristic grand projects, from the Pompidou Centre to HS2, and Boris Johnson seems to be particularly addicted to them, writes *Sean Thompson on the Red Green Labour website*.

His career has involved numerous doomed attempts to create a permanent monument to his greatness; Boris Island, the proposed new airport in the Thames estuary, the Boris Bridge One, over the Thames, Boris Bridge Two, between Scotland and the North of Ireland and, most ludicrously, the Boris Tunnel, between either Anglesey and Dublin or Stranraer and Larne. Now, his new great enthusiasm is for building nuclear power stations, announcing on 2 May that 'Nuclear power stations…are absolutely crucial to weaning us off fossil fuels, including Russian oil and gas. Instead of a new one every decade, we're going to build one every year'.

Clearly, not even even in Johnson's most fevered moments of techno fantasy can even he imagine that such a wild promise could be fulfilled by building more behemoths (or is it dinosaurs?) such as that being built at Hinkley Point – estimated cost £18bn, actual cost £23bn and counting, and proposed for Sizewell – estimated cost £20bn, actual cost £?bn. The [UK] Government is desperate to find someone to take on construction of a new reactor at Wylfa on Anglesey but will have to come up with such a hugely generous deal to get it off the ground (if ever it does) that it's unlikely that any more sites will even be proposed. In order to meet its proposed target of expanding nuclear power generation to provide 25% of Britain's electricity capacity by 2050 (it's currently at 16% and due to fall to 10% by 2030), Johnson's government will have to rely on the successful development and rapid roll out

of the SMRs (small modular reactors) being touted by Rolls Royce.

On the face of it, this might seem to be a good idea, since Rolls Royce has been producing small pressurised water reactors, to power submarines, at its Marine Operations plant in Derby since 1965. Rolls-Royce aims to build 16 SMRs, which it says would have a 'target cost' of £1.8bn each (as long as at least 5 are ordered simultaneously – so a sort of super BOGOF deal). Rolls Royce claim that the reactor itself will be 'only' about 16 metres by 4 metres, and thus able to be transported by road, rail or sea, although each plant will have an area of around five and half football pitches.

This all sounds like a very attractive option to those who look to nuclear energy as the silver – though hugely expensive, and radioactive – bullet that might allow for the continuation of business as usual in the face of global warming. However, Rolls Royce and Johnson are ignoring a number of inconvenient issues; so far, not one SMR has actually been manufactured and operated in the real world, the costs – like all large engineering projects using untried technology, will almost certainly be very much higher than estimated – and, like all other nuclear reactors, they will have a limited life before they must be decommissioned and even during their active lives they will produce highly toxic waste that must be safely disposed of.

Of course, the problems of safely dismantling and disposing of small nuclear reactors must surely have been sorted out by now, since Rolls Royce have been manufacturing small pressurised water reactors for nuclear submarines for 57 years? Unfortunately not.

Britain's first nuclear submarine, HMS Dreadnought, launched in 1966 and decommissioned in 1980, has now been tied up in the naval dockyard at Rosyth [on the Forth Estuary in Scotland] far longer than she was in active service. In all,

there are currently 21 former Royal Navy nuclear submarines awaiting disposal, 7 in Rosyth and 14 in Devonport, with another due to go out of service next year and five more to be scrapped by 2040.

The original plan was, like the USA and the USSR, to dispose of decommissioned nuclear subs by filling the them with concrete and sinking them in the deep ocean but thankfully the disposal of nuclear waste at sea was banned by the London Dumping Convention in 1983. By now more than £500M has been spent on submarine storage and maintenance since the Dreadnought was retired and the bill is going steadily up each year.

One of the reasons for the extraordinary delay in dealing with this ever growing pile of radioactive junk [much of it in Scotland – eds] is that, while in the civil nuclear industry, operators are required by law to put aside funds and make plans during the life of the plant to pay for decommissioning – which partly accounts for electricity generated by nuclear reactors being by far the most expensive energy source available – no such requirement was made of the MoD and successive [UK] governments failed to make arrangements for the timely disposal of these vessels.

Planning for the dismantling of these submarines should have been started at the time of the London Dumping Convention almost 40 years ago, but only in the last 10 years, as the space available for storing nuclear hulks steadily filled up (Rosyth is full and there is currently space for only one more at Devonport) has there been any serious effort to deal with the issue. As a result, in January Forces Net the MoD's in-house PR website proudly announced a 'world first' – the MoD was going to start to cut up and dispose of its old nuclear submarines. According to the MoD the total disposal cost will be at least £3bn over 25 years and continue into the 2040s.

However this claim looks, to say the least, rather optimistic.

In 2003 the facilities for de-fuelling were deemed no longer safe enough to meet modern regulation standards and the process was halted, meaning that 11 of the hulks are still full of uranium fuel rods. And even if or when the fuel rods can be removed, disposing of the 10% of the hulks that are classified as Intermediate Level Waste remains an unresolved problem.

Low-Level Waste from the hulks can be stored at Sellafield in vaults along with the huge amounts of radioactive detritus generated by Britain's nuclear power stations, and, according to the Navy Lookout website, in 2017 a partly UK Government owned company, URENCO Nuclear Stewardship, was commissioned to provide an interim site at Capenhurst in Cheshire for the more dangerous intermediate level waste, which includes the Reactor Pressure Vessels removed from the submarines. The waste will be 'temporarily' stored in purpose-built buildings above ground but, according to the MoD PR handouts, will eventually be moved to a permanent underground 'Geological Disposal Facility', which will have to be built in the 2040s as by then the Capenhurst facility will be full. The only problem with this plan is that successive [UK] governments have failed to find a permanent disposal site – partly because identifying such a site has proved to be geologically extremely elusive but also because trying to locate it almost anywhere in the UK would be as politically toxic to its proponents as its proposed contents would be radiologically.

This Rolls Royce's vaunted techno-fix runs up against the same intractable problem that has faced the nuclear energy industry since its inception; it produces toxic waste that must be securely stored for tens of thousands years, and and so far no one has found a way to safely and permanently do it.

Reproduced from Red Green Labour: https://redgreenlabour.org/2022/05/19/nuclear-subs-and-rolls-royces-silver-bullet/ 19 May 2022

[Photo above: One of four UK government nuclear-powered and nuclear-armed submarines, HMS Victorious, departs the Faslane naval base on the Clyde. Photo from Ministry of Defence via WikiCommons Open Government Licence.]

Protestors at Faslane Peace Camp call for Nuclear Free Scotland. Photo: The Nuclear Resister nukeresister.org

*[**Editorial note:** This article was written for a Britain wide audience but there is a specific Scottish dimension that needs raising as well. The Scottish Government of the Scottish National Party (SNP), supported by the Scottish Green Party, is currently opposed to Boris Johnson and the UK government building any further nuclear (fission) power stations in Scotland, and under UK devolution laws has control over the planning system to prevent any being built. However, the UK government currently has control over the Faslane naval base on the Clyde and the four nuclear-powered submarines armed with the Trident nuclear missiles that are permanently based there. These submarines are due to be decommissioned and replaced, and as the article above shows the UK government controlled Rosyth naval base on the Forth has been used to store submarine based nuclear reactors no-longer used in active service. With Nicola Sturgeon in Washington this week*

*recommitting a future independent Scotland to membership of the NATO military and nuclear alliance, and thereby the continuation of the nuclear weapons and nuclear powered submarines programme, concerns should be raised at how it is not possible to achieve **a nuclear free Scotland** under the SNP. Mike Picken for ecosocialist.scot. See also: Faslane Peace Camp 40th Anniversary 10-12 June 2022.]*

Faslane Peace Camp 40th Anniversary 10-12 June 2022

The Faslane Peace Camp celebrates its 40th Anniversary on 12 June 2022 and is holding three days of events at the camp to commemorate and talk about getting rid of nuclear weapons, *reports Mike Picken*.

The camp, approximately 40 miles west of Glasgow on the Clyde estuary, was one of a number of direct action protests against nuclear weapons set up across Britain in the 1980s – of which the Women's Peace Camp at Greenham Common came to prominent world attention at the time when US nuclear-armed Cruise Missiles were based there.

Faslane is now the sole location for the deployment of the UK state's huge nuclear arsenal (there are manufacturing and storage facilities elsewhere and convoys regularly cross Britain's road).

There are four Trident submarines based permanently there, and the UK government has recently announced a unilateral increase in the number of nuclear warheads deployed to over 200. One

of the reasons why the UK state and establishment so fears Scottish independence is because there is a clear commitment in the independence movement to remove Trident nuclear weapons from Scotland.

Trident means that the Camp has therefore continued for forty years to act as a focus for action against nuclear weapons across the UK state and is deserving of support from across the labour, trade union, peace and Scottish independence movements.

The programme of events is still being finalised, and ecosocialist.scot will publish and support it as soon as we have details – so keep a lookout on our Twitter account and this website. Supporters will be welcome at any time 10-12 June, whether just for a few hours or for the whole period.

The Scottish Campaign for Nuclear Disarmament (CND) voted at its Annual General Meeting to support the anniversary and can also be approached; details here: https://www.banthebomb.org/

You can contact the camp by email: faslanepeacecamp@protonmail.com Facebook: https://www.facebook.com/faslanepeacecamp/

The best way of getting to the Camp for most people is to travel to the nearby town of Helensburgh first, there is a regular train service from Glasgow. For travel to the Camp itself from Helensburgh, the following advice is given:

> *The Peace Camp consists of a line of caravans and buses along a short stretch of the A814 approaching Faslane. Visitors, and potential new residents, are always welcome, and the Camp is child- and dog-friendly. Please be aware that alcohol and drugs are not allowed in the communal spaces to which visitors have access.*
> *The Camp is most easily reached by bus from Helensburgh; the 316 service travels between the train station and Peace Camp*

twice an hour through most days, and the fare is £2.15 at the time of writing. Alternatively, it's a 20-minute cycle or hour's walk along the coastal road to the west of the town.

Step up opposition to nuclear weapons!

Russia's appalling actions in invading Ukraine, a state that voluntarily gave up nuclear weapons, have put pressure across Europe on governments to increase support for the NATO nuclear alliance and nuclear weapons. We need to oppose this and say loudly and clearly that nuclear weapons are no defence against imperialist actions like Russia's and that more than ever we need to remove nuclear weapons from Europe and the world. Supporting the Faslane peace camp anniversary 10-12 June, opposing Trident, and calling for more states to sign the UN Treaty on the Prohibition of Nuclear Weapons (TPNW) (which finally holds its postponed first conference of signatories and civil society in Vienna late June) are among the best ways of bringing an effective future world free from weapons of mass destruction.

CND banners at the Faslane nuclear base (Pic: Sept 2021 M Picken)

Against War and Climate Change – Scotland must break with ‘net zero’ and NATO

The latest report by the world’s scientists doesn’t mince its words *writes Iain Bruce*. The impacts of climate change are being felt sooner, more deeply and more often irreversibly, than they had previously predicted. The threat to human wellbeing, even the ability to eat, is ever deeper, and ever closer. And for the first time, the UN’s Intergovernmental Panel on Climate Change (IPCC) puts inequality and the need for social justice at the centre of its analysis. The fact that the “people and ecosystems least able to cope are being hardest hit” is a constant theme throughout this report by the IPCC Working Group II on Impacts, Adaptation and Vulnerability. The arguments for climate justice, which includes social justice, racial justice, gender justice, made so forcefully on the streets of Glasgow barely 100 days ago, seem to be finding their echo in the scientific community.

Yet the urgent message compiled from work by scientists across the world, risks being lost in the fog of war.

As the 195 member countries of the UN Framework Convention on Climate Change were meeting last week to agree on the summary to this report, the delegates from Ukraine had to drop off the Zoom call, because they heard explosions outside. It was a poignant reminder of the connections between the multiple crises and threats that human society now faces.

Some of those involved in the report have already expressed their fear that the war in Ukraine may destabilise the UN

climate talks system and divert attention from the seriousness of the threat to human wellbeing and the need for urgent action. But the connections run deeper. Sections of the Tory right argue that the need for NATO's European members to break their dependence on Russian fuel means more oil and gas will be needed from elsewhere – whether shale oil from the United States or additional gas from the North Sea. NATO becomes another justification, alongside the fiction of 'net zero', for fossil capital to continue business as usual while talking of a transition to clean energy.

The Scottish government has taken a principled position against the Russian attack on Ukraine and in favour of a more generous welcome for those fleeing the war. But it fails to identify NATO's responsibility. As David Harvey has pointed out, Putin's 'Great Russian' chauvinism has been fed by three decades of humiliation at the hands of western imperialist powers. It cannot be understood apart from the years of neo-liberal shock therapy and the mendacious expansion of NATO. Despite its commitment to removing the British nuclear weapons arsenal situated at Faslane on the Clyde, the SNP has been committed to NATO membership since its 2012 Conference controversially reversed its previous opposition.

There is a parallel with the SNP government championing more solidarity with countries in the global south around climate change. On the one hand it tries to promote a fund to pay for the loss and damage they have already suffered from climate change, while remaining wedded to the narrative of 'net zero' that allows the fossil fuel industry to continue to extract oil and gas from the North Sea.

Among its other stark warnings, this latest IPCC report severely undermines the case for 'net zero', which invariably includes a projection of temporarily overshooting the critical limit of 1.5 degrees of global warming. It states, "Even temporarily exceeding this warming level will result in additional severe impacts, some of which will be irreversible.

The links between war, fossil fuels and climate change are not that difficult to see. As radical climate activist Daniel Tanuro explains in his summary of the IPCC report, that ecosocialist.scot publishing here,

Impacts of warming: faster and more severe than expected, says IPCC

https://www.ecosocialist.scot/?p=1155

we need to seize on the connection the scientists have made between the threat of climate change and inequality.

In Scotland that means building the movement for independence on a basis of climate justice in the fullest sense.

28 February 2021

Iain Bruce is a journalist and climate activist living in Glasgow.

All out for Faslane on Sunday 26 September!

To coincide with the **International Day for the Total Elimination of Nuclear Weapons** on **Sunday 26 September**, the Scottish Campaign for Nuclear Disarmament is calling for a

major demonstration from across Scotland at Faslane on the Clyde, *writes Mike Picken for ecosocialist.scot.*

Faslane is the home for the UK state's Trident submarines and nuclear weapons. The theme of the demonstration will be "**Disarm for Our Planet for peace and climate**", because it is also the run up to the COP26 gathering of world leaders in Glasgow in November. COP26 takes place less than 50 kilometres from the Faslane nuclear weapons base. The demonstration also marks the culmination of a week long 'Climate Fringe' to help build protest events around the COP26 taking place across Scotland (and in the rest of the UK where it is known as "Great Big Green Week").

Die-in Protest

Demonstrators will stage a mock "die-in" on marine/wildlife themes at the Faslane base to highlight the destructive effect of nuclear weapons production on our planet and oceans. In towns and villages where people cannot make the transport to Faslane (possibly due to the ongoing Covid crisis), activists will be encouraged to organise parallel "die-in" events. The idea of the "die-in" is to give the protest an ecological theme that links nuclear weapons production and potential use with the enormous death toll that pursuit of such weapons does to the natural life of the planet.

The **26 September** demonstration starts at **2pm (14.00)** at the North Gate and the die-in will take place at 3pm. You can register and find the details for the demonstration here: https://www.eventbrite.com/e/disarm-for-our-planet-tickets-164178902517 and transport will be arranged from around the country by local peace, CND and COP26 coalition groups. See the Scottish CND website for up-to-date information: https://www.banthebomb.org/index.php/news/2147-cop26

Nuclear Weapons and COP26

Scottish CND rightly argue that nuclear weapons should be an important issue at the COP26:

> ***Why does it matter?***
>
> *Conflict and militarism are among the biggest contributors to climate change.*
>
> *Any nuclear conflict would cause climate catastrophe overnight: changing weather patterns, plunging billions into famine, and devastating the Earth's ecosystems. No climate justice is possible until all nuclear weapons are disarmed.*
>
> *But the catastrophe isn't just waiting to happen sometime in the future. The military is one of the biggest contributors to carbon emissions, in the UK and in other countries. Government promises on climate change – for whatever they're worth – barely even acknowledge the military problem.*
>
> *And every stage in the lifecycle of nuclear weapons, from mining uranium for warheads, to the impossibility of safely disposing of nuclear waste, is seriously damaging to humankind, to our natural world and to the survival of our planet as a whole – and that's before we account for the impact of accidents, nuclear 'tests' and attacks. We are already paying an enormous and unacceptable price – which, once more, falls largely on the shoulders of the world's poorest and most disenfranchised communities. It's time for change. (Source: Scottish CND)*

Increase in warheads

Earlier in 2021, the UK government announced a massive increase in the number of warheads within the UK's Trident

nuclear arsenal. You can read more about this appalling development here. Far from focussing on the priority of economic recovery from the Covid pandemic, as the Scottish Tories claim should happen, the UK Tory government are spending billions of pounds of taxpayers' money on a major and possibly illegal escalation of the arms race. Meanwhile, opposition to nuclear weapons is growing and more and more countries are signing up to the Treaty on the Prohibition of Nuclear Weapons.

Independence

Many advocates of Scottish independence are also against nuclear weapons. Faslane in Scotland is now the sole base of the British nuclear weapons fleet, though there are manufacturing and storage facilities elsewhere in the UK state. The Scottish National Party (SNP) has been the ruling government in the Scottish Parliament for 14 years and have proclaimed their opposition to nuclear weapons for decades before that; however in 2012 they changed their policy to one of supporting the UK and a future independent Scotland remaining in the NATO nuclear alliance. The leader of the newly formed Alba Party, Alex Salmond, was among the strongest supporters of NATO membership when he was SNP First Minister of Scotland.

The pro-independence All Under One Banner organisation supported by the NOW Scotland independence campaign called for the independence movement to hold a demonstration against British nuclear weapons at Faslane on **28 August.** But there was a relatively poor turnout and an eclectic programme of speakers . Independence is certainly a route to eliminating nuclear weapons from Scotland (and hence it is supported by Scottish CND). Campaigning for independence does not absolve us from fighting against the current UK government or guarantee that a future independent Scotland will not hide

under the NATO nuclear umbrella. The Scottish Labour Party Conference voted against Trident in 2015. But in the Scottish Labour manifesto for the UK General Election it advocated support for the UK Labour Party policy of keeping Trident and spending 200 billion pounds on its renewal. Thousands of Labour members and voters reject the party policy of support for nuclear weapons.

While we should support all broad-based protests against nuclear weapons, the priority for environmental and independence activists should be to build the widest possible basis for opposition to all nuclear weapons and the NATO nuclear alliance. Both environmental and independence activists should support CND, the organisation leading the mass campaign against nuclear weapons in Scotland and across Britain for over 60 years.

Put COP26 and opposition to nuclear weapons centre stage

This autumn we need to link the campaign against nuclear weapons with the forthcoming COP26, that puts Glasgow at the centre of the world stage, and that means mobilising as many people as possible for the Scottish CND demonstration on peace and climate at Faslane on **Sunday 26 September**.

No more Nukes: Time to Scrap

Trident!

The Tory UK government has announced a massive increase in the number of Trident nuclear warheads to be held in Scotland at the Faslane submarine base just along the Clyde river from Glasgow.

The integrated review of security, defence, development and foreign policy published on March 16th included a 40% increase in the nuclear weapons stockpile. The UK currently has around 200 warheads, but had previously announced a cap of 180 by the mid-2020s. It will now increase this cap to 260 warheads.

The Campaign for Nuclear Disarmament immediately called an emergency online protest rally addressed by speakers such as Green MP Caroline Lucas and former Labour leader Jeremy Corbyn – the rally can be watched here.

Scottish CND was already planning a campaign against Trident and other nuclear weapons for the forthcoming Scottish Parliament elections on Thursday 6th May. An online public meeting of Scottish CND discussed this campaign on 17 March and was well attended by activists from across Scotland.

Candidates contesting the Scottish Election are to be asked: 1) to commit to supporting the Treaty on the Prohibition of Nuclear Weapons and to outlawing nuclear weapons; and 2) to commit to disarming the UK's nuclear arsenal in Scotland by the most direct route possible; and 3) to speak out publicly, and commit to sign the International Campaign Against Nuclear Weapons (ICAN) Parliamentarians' Pledge if they are elected.

With the entire UK arsenal of nuclear weapons based in Scotland, how the parties line up on 6th May will be an important aspect of the Scottish Parliament elections. The Tories will be supporting nuclear weapons and their government at Westminster will be pursuing the replacement of the Trident system at an estimated eventual cost of 200 billion pounds.

The leadership of Keir Starmer means that the UK Labour Party will also line up with the Tories and support nuclear weapons and Trident replacement. The Scottish Labour Party conference voted in 2015 to oppose Trident and its renewal. However in its manifesto for the UK General Election in December 2019, Scottish Labour declared that as defence was a matter 'reserved' for the Westminster parliament Scottish Labour candidates would back the UK Party policy of supporting Trident. The new Scottish Labour leader, Anas Sarwar, has made noises that the Scottish party will maintain opposition to Trident but it remains to be seen whether they will back Starmer's leadership or risk a row within the party. The SNP say they are against Trident and want to scrap Britain's nuclear weapons. However in 2012, the SNP changed their policy on NATO from opposition to one of support. Under SNP leadership, an independent Scotland would join NATO. But NATO is a first and foremost a nuclear alliance and members face considerable pressure to accept nuclear weapons – no NATO member has yet signed the Treaty on the Prohibition of Nuclear Weapons and would face possible expulsion were they to do so. At a recent online seminar on whether an independent Scotland could rejoin the EU, a leading expert argued that it would have to show commitment to "EU values" by joining NATO first (EU-NATO coordination is expanding rapidly and all EU member states are encouraged to support NATO). The Scottish Green Party are the only one of the existing parties in the Holyrood parliament who support CND's policies of opposition to both nuclear weapons and NATO.

JOIN CND! STOP TRIDENT! NO NUCLEAR WEAPONS IN SCOTTISH WATERS!

Mike Picken, ecosocialist.scot 19 March 2021