

New proposals to support rapid and safe rollout of fusion energy

A [new report](#) published today (Tuesday 1 June) has set out how the UK can support the rapid and safe introduction of fusion energy as the technology develops.

Produced by the Regulatory Horizons Council (RHC), an independent expert committee which identifies regulation required to foster technical innovation, the report makes recommendations on how fusion energy should be regulated in light of its inherently lower risk than nuclear alternatives.

Fusion is the process that powers the sun. A fusion power plant would combine hydrogen atoms to generate energy without giving off the carbon emissions that contribute to climate change. The UK hopes to deliver the world's first prototype fusion power plant, STEP (Spherical Tokamak for Energy Production), by 2040.

The RHC report states that innovation-friendly regulation will allow the technology to be rolled out quickly and safely, boosting the confidence of both the public and investors.

Science Minister Amanda Solloway said:

Fusion energy has enormous potential, offering an inexhaustible source of zero-carbon energy and helping us to cement the UK's position as a science superpower.

Today's report helps put the foundations in place to deliver the world's first prototype fusion plant by 2040 and ensures we can capitalise on the exciting innovation taking place right here in the UK.

Focusing on the STEP programme announced in October 2019, the report recommends the Health and Safety Executive (HSE) and the Environment Agency lead on developing current regulations and putting the best framework in place for the technology to flourish.

Due to the lower risk associated with fusion than with nuclear fission, the report recommends that the current regulatory approach, led by HSE and the Environment Agency, is the most appropriate framework and that the more stringent regulations applied to nuclear energy would be disproportionate.

To ensure the target of delivering a fusion plant by 2040 is met, the report also recommends the government consults with business and the public on its plans for fusion energy in summer 2021 and begins a public awareness programme to increase understanding of the topic. Additionally, it advises that a joint guidance document is produced by EA, HSE and the Department for

Business, Energy and Industrial Strategy (BEIS) to provide further clarity and ensure confidence in the technology.

Following the publication of the report, the government has today confirmed that it will launch a consultation on fusion energy regulation later this year, allowing industry and the public to have their say. The government has published an [interim response](#) to the RHC report and will respond to the report in full in early 2022 after its consultation.