



Parliamentary and Scientific Committee



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Smart Energy

Is innovation out-pacing regulation?

Millions of households across the UK have had smart meters installed in recent years, however this is simply the beginning of the technological innovation within Smart Energy. Companies such as Verv have been making rapid progress in the research and development of carbon emission reducing technology. Despite this positive progress, there is still a long way to go. This month's meeting, in partnership with UKRI, saw the discussion of what the public, leading experts, and the Government can be doing to support the future of Smart Energy.

The biggest barrier in the progression of Smart Energy research is the current outdated regulations surrounding the topic. The Government must keep up with the fast-paced development of the new technologies, by regularly reviewing and adapting legislations. Predicting household energy use is very easy and there are many ways of doing so, but then what? The data obtained needs to be shared with relevant parties and ways of reducing household bills and energy consumption must be explored. Another example of regulations which could be reviewed are those surrounding the existing water source heat pumps, that could easily be used to make a positive impact.

Funding is a key element in all research, including Smart Energy. The funding obtained from the Government is vital, however independent investors are also very important. Therefore, security for investors is crucial and needs to be monitored and governed. A modern way of financing for companies like Verv, are websites such as Crowdfunding, where the public can donate to charities, research and more. This has a lot of benefits including tax relief and can be a great way to advertise and promote the essential research being conducted. A money saving suggestion for new renewable energy installations was the possibility of adapting the current unused

coal and oil power stations. The same principle applied with laboratories, which along with power plants are very expensive to build from scratch.

With the development of new technologies, comes more job opportunities. However, these jobs are still being defined and the skills required are constantly adapting. Schools and colleges should be encouraged to revise STEM curriculum to accommodate for these new job prospects. Opportunities for more training should also be available to those already in STEM careers.

Climate change has been at the forefront of people's minds since the Strikes in September 2019, and this has caused many people to change their habits, such as eating less meat or flying less. People should be encouraged to further adapt their lifestyles by small amounts, such as installing AI technology to reduce the energy use of household appliances. The benefits these simple changes should be promoted in new ways, such as viral campaigns, supported with credible data and information on the positive impacts on the environment.

With the support of the Government, Smart Energy could make a huge impact in the reduction of carbon emissions. From more frequent regulation review and funding, to education and publicity campaigns, there are many ways the development of Smart Energy can be aided. However, we as individuals should stop and think; what can we do? From taking the time to understand Smart Energy, it's easy to see that small lifestyle changes can make a big difference to the future of our planet.

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