

# Research on the Environment, Health, Consumer Behaviour and the Economy: ESRI Research Programme on Environmental Socio-economics 2020–2022

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## Identifying pressures

The EPA/ESRI Research Programme on Environmental Socio-economics brings together a diverse set of research topics with the aim of producing policy-relevant applied research at the interface between the environment, economy and society. A range of data and methodological approaches are used to provide insights into the environmental challenges facing Irish society. This report provides a detailed summary of the 12 topics examined in the third phase of the programme, which was carried out between 2020 and 2022. These topics can be grouped under four broad themes:

1. environment and health;
2. behavioural science;
3. biodiversity and agriculture;
4. climate change.

The findings from the project Measuring the Health and Well-being Benefits of being a Citizen Scientist, which spanned phases 2 and 3 of the research programme, are also summarised in this report.

## Informing policy

Research on drinking water quality and its effects on population health found that, while the burden on the acute healthcare system in Ireland from water-related diseases (WRDs) is relatively moderate, WRDs disproportionately affect younger people and a small number of rural or children’s hospitals during the spring and summer. This finding in particular will allow limited public health resources to target specific regions at certain times of the year to further reduce morbidity and the costs associated with WRDs.

While governments introduce taxes and incentives to deter emissions contributing to climate change, these policies focus on reducing national (production) emissions and not the global level of emissions. The research shows that the emissions embedded in Irish imports are extremely large, resulting in consumption-based emissions being more than double production-based emissions. Policymakers need to look beyond our borders and consider the emissions that our consumption patterns create in other nations.

## Developing solutions

The way information is presented affects the extent to which people attend to that information and also the choices they make. Using insights from behavioural science, the research provided evidence for policymakers and public bodies tasked with communicating with the general public about different environmental risks and behaviours. For example, the project on radon testing found that understanding of the risk from radon can be improved by a strategy that provides households with more information about radon, and also communicates risk statistics using numerical frequencies. In addition, careful pre-testing of the design features of a radon risk map (including numerical frequencies, e.g. “1 in 5 homes”) results in substantially more people who are highly willing to test their home for radon. The redesigned map has now been adopted by the EPA.