

Research, Science and Technology Policy

Spokesperson: Gareth Hughes MP

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Introduction

Research, science and technology (RS&T) is central to our present and future wellbeing. For the Green Party, its role is to improve the quality of our lives and to sustain and replenish the ecosystems on which we depend. Scientific endeavours should be based on ethical research principles, including the precautionary principle.

Our economic and social development is closely linked to investment in RS&T. We will therefore commit more funding, reform science structures to reduce overheads and improve efficiency, ensure that we are a global destination for science talent, focus RS&T on greening the economy, develop and adopt use of appropriate technology, work much more closely with Māori on RS&T, and strengthen science education.

Stronger links are needed between researchers, Government, business and community sectors in proposing, assessing, and utilising research.

Specific Policy Points

1. Investment in RS&T

The Green Party advocates a change in existing investment mechanisms. We would work to implement the following changes to the current model of funding:

1. Significantly increase total investment in RS&T and reduce organisational complexity, transaction costs and overheads associated with funding decisions and research delivery.
2. Provide greater employment security for researchers, including base funding of salaries.
3. Review RS&T funding levels on a rolling five year basis, in consultation with science providers, those who make direct use of RS&T, and the community.
4. Expand the range of time frames over which research can be funded to include both the very short term and the long term.
5. Include peer review, client assessment, and/or independent audit in the funding allocation system.
6. Emphasise multi-disciplinary and collaborative projects on complex environmental and social issues.
7. Direct public funding to support fundamental and applied science research, while leveraging private funds to develop technologies based on this research.
8. Introduce clear ethical investment guidelines for the Government's venture capital funds.
9. Encourage foreign investment in research and development in line with Aotearoa New Zealand strategic priorities.

We also believe that local industry and business must raise their commitment to research investment. To this end, we would examine the best means to encourage an increase in private sector funding, especially from small and medium sized enterprises (SMEs). The Green Party will:

10. Identify the factors that affect research and development spending among similar businesses and assess how to raise investment by those businesses.
11. Facilitate pooling the research and development funds of SMEs through clustered partnerships with research institutions.

2. Structures

The Green Party advocates a new model for the structure of science research in Aotearoa New Zealand, to be developed in partnership with those affected. This new model will:

1. Change the existing sector-focused and corporatised science model in Crown Research Institutes (CRIs) and universities into one that that enables cross-disciplinary research, focuses on public good and economic transformation, and is more enabling and empowering of science and innovation.
2. Provide a career for scientists no less secure than that for other similarly qualified professionals in the public sector.
3. Ensure that RS&T structures and funding:
 - a. Enable Māori as tangata whenua to be involved at all levels; and
 - b. Promote gender equity, ethnic diversity, and participation by people with disabilities.
4. Support and enable science communication by scientists as advocates.
5. Have a broadly-based performance appraisal methodology that recognises contributions of scientists to different sectors rather than just the number of papers published in peer-reviewed journals.
6. Establish more links between researchers and the rest of society, so that research can be better focused on community needs and that the results of research are made more readily available.
7. Provide opportunities for teaching staff in tertiary institutions and the secondary and primary sectors to be involved in active research, through exchanges and similar programmes.
8. Ensure that all research is conducted within strict ethical guidelines and make the assessment of the ethics of research more open to public scrutiny.
9. Maintain core support facilities such as libraries, specimen collections, and other information resources.
10. Promote open data and data sharing, and have all the results of publicly funded research published and held in the public domain, with proceeds from patents, licensing, etc. being reinvested in the funding pool.

3. What Research?

The Green Party believes that we need to invest in research that contributes to sustainability through innovation, knowledge creation, adoption of appropriate technologies, and changes in practice. Specific research priorities need to be developed in partnership between the community, Māori, industry and government.

4. Technology

At the heart of sustainable technology is the idea of 'appropriate technology' - technology that helps us work together more effectively and tread lightly on the earth. We strongly support a commitment to technology that enables us to do more with less

for longer. To encourage development of appropriate, ethically acceptable technology, the Green Party will:

1. Require grant schemes to use contribution to sustainability as a key criterion in making funds available to support technology development.
2. Make information about sustainable technologies more widely available, either by expanding the Energy Efficiency and Conservation Authority (EECA) or creating a new agency.
3. Create additional demands for sustainable technologies by making them available to developing nations as part of Aotearoa New Zealand's overseas development assistance.

5. Te Tiriti o Waitangi and Science

The Green Party opposes the creation of patents over life. We respect Māori concepts of the sacred nature of mauri (the life force) and of whakapapa (ancestry or biological heritage), and believe that they provide relevant ethical guidelines for the conduct of science and biotechnology in Aotearoa New Zealand.

The Green Party supports the development and study of traditional Māori knowledge within the public science system. Such work can only occur in partnership with local Māori, may involve new science structures, and must ensure that intellectual property rights remain with Māori.

6. Science Education

The Green Party supports science education within the school system as an essential part of understanding the world. It is important that scientific research is seen in a greater context. Science teachers need to be adequately prepared and keep in touch with new developments in science. To achieve these goals we would:

1. Require environmental education and ethics to be parts of all scientific programs of study, including science education.
2. Expand links between research scientists, technology developers, and educational institutions to give more opportunities to primary and secondary school teachers to undertake research with researchers in universities, CRIs or private research establishments.
3. Expand efforts by research scientists and technology developers to engage with young people.