

Energy Policy

Vision

The Green Party envisions a New Zealand in which:

- All reasonable needs for energy services are reliably and affordably met from renewable energy.
- There is much smarter use of energy, which would allow the scale and impact of energy production and consumption to be reduced in line with ecological sustainability.
- All New Zealanders are involved in decisions about energy and take responsibility for using it sustainably.

Key Principles

1. The scale and rate of energy use are key elements that affect the sustainability of energy supply and both are subject to ecological limits.
2. We need to progressively reduce our use of fossil fuels to a very low level, eventually meeting our energy needs with renewable energy.
3. To avoid social, economic, and environmental disruption, the reduction of fossil fuel use needs to be planned, the burden shared fairly, and replacement energy sources need to have a low environmental impact.
4. Iwi and hapū rights under Te Tiriti o Waitangi to manage and develop their resources must be recognised and supported in the transition to a sustainable energy future.
5. As far as practical, energy demand-side optimisation, efficiency and conservation should be prioritised before new supply-side investment.
6. The electricity industry, including generation, transmission, distribution and retail, should be governed and operated with the primary objective of enabling all New Zealanders to meet their reasonable needs for energy services while minimising environmental impacts. The industry should offer choices between

electricity and other fuels, and also enable demand side management to reduce energy bills.

7. Energy services, such as warm houses, food production and supply, transportation, and industrial processes, must be provided using much less energy than now, through both improvements in efficiency and changes in behaviour. This is necessary to minimise environmental impacts and ensure the ongoing availability of energy services.
8. Energy industry planning should give consideration to future macro-level opportunities and risks, such as those due to climate change, planned irrigation schemes, public and electrified transport options, distributed generation and population growth. A holistic approach to regulation and market decision-making must be coordinated to deliver sustainable energy services.
9. Individuals, communities and businesses need to be empowered to make decisions about energy and its use that improve affordability and enhance sustainability.

Specific Policy Points

1. Responding to climate change and the end of cheap oil

Along with our [Climate Change](#) policy, all policies in this document will contribute to reducing greenhouse gas emissions and assisting in the rapid transition away from our current heavy reliance on fossil fuels.

A. Transitioning away from fossil fuels

Policy Positions

- 1.1. Rapidly end oil, gas, and coal extraction, to enable the necessary transition to a sustainable, just, green economy and to minimise the devastating effects of climate change (see our [Mining](#) policy).
- 1.2. Strengthen the regulatory regime for the oil and gas sector, to minimise their impact on our environment and climate.
- 1.3. Support the rapid development of a fully renewable electricity generation system, except for emergency supply.
- 1.4. Set an ambitious goal, consistent with our commitments to keep global warming to 1.5 degrees, to increase the share of renewable energy in total primary energy supply (which includes fuels for heating, industry and

transport, for example, and is therefore currently much more reliant on fossil fuels than our electricity supply).

- 1.5. Develop a national transition strategy which includes:
 - a) Maintaining energy security while phasing out the use of fossil fuels;
 - b) Examining the role of direct electric power, biofuels and hydrogen from renewable electricity for transport services and industrial use;
 - c) Assessing the impacts of changes in global energy systems and reducing greenhouse gas emissions on transport, our trading relationships and main industries, and an investigation of the role of new technologies in these industries;
 - d) A comprehensive public information programme to enable broad-based public participation in the reduction of energy consumption and transition away from a dependence on fossil fuels;
 - e) Developing an international strategy to:
 - i. Share technology and expertise with smaller Pacific nations; and
 - ii. Cooperate with other nations and develop an international agreement on sharing the remaining oil, to reduce conflict over its allocation.
- 1.6. Fund research and development of sustainable energy technologies where New Zealand has a natural advantage, such as wind and wave, current and tidal power systems.
- 1.7. Significantly reduce fossil fuel use in road, air and sea transportation through sustainable urban planning and design, transitioning to low emission vehicles and fuels, and facilitating active modes (walking and cycling), integrated public transport, rail transport (including freight), and coastal shipping (see our [Transport](#) policy).

B. Price signal to promote sustainable energy generation and use

Policy Positions

- 1.8. Transition from an ineffective Emissions Trading Scheme and introduce an effective emissions levy that provides a greater degree of certainty over the price on greenhouse gas emissions, creates improved transparency, and provides far stronger incentives for emissions reduction (see our [Climate Change](#) policy).
- 1.9. Support the continued use of carbon price signals to encourage projects that reduce fossil fuel use and develop renewables, and extend the programme to smaller projects.

- 1.10. Offer a tax incentive of accelerated depreciation for investments in industry, commercial buildings and farming that increase energy efficiency or the use of renewable energy.
- 1.11. Encourage the development of emerging renewable technologies by ensuring micro-generators have price certainty by establishing fair and reasonable Feed-in-Tariffs.

2. Improving electricity system planning and co-ordination

A. Transforming the Electricity Market

The electricity market needs to be structured to deliver sustainable, affordable and reliable energy.

Policy Positions

- 2.1. Re-establish the Electricity Authority as a Sustainable Energy Commission with research, advisory and regulatory functions, and with responsibility for all fuels and a clear mandate for sustainability.
- 2.2. Reform the current electricity market structure and ensure that the market encourages competition amongst generators and retailers, delivers affordable electricity and works in the national interest, including:
 - a) Re-balancing the wholesale electricity market to remove the market power and excessive profits of large generators.
 - b) Encouraging demand side participation in the market, ensuring that all consumers are incentivised to limit their peak demand, and hence minimise future grid investment and associated consumer price rises.
 - c) Encouraging distributed generation for houses and businesses, to the extent that this makes environmental and economic sense.
 - d) Encouraging the development of equitable electricity and gas pricing mechanisms which contribute to increased energy affordability.
 - e) Encouraging demand response mechanisms such as ripple control, ensure they are adequately maintained to minimise future grid investment and costs, and further ensure that the cost savings available from such load control mechanisms are actively promoted to consumers.

B. A sustainable approach to electricity lines

Investment in distributed generation and load shifting as well as smoothing peak demand can reduce the need for costly grid upgrades.

Policy Positions

- 2.3. Work with Transpower and local electricity distributors to develop a long-term strategy to ensure the grid can serve as a network connecting a distributed energy system with minimal environmental impact.
- 2.4. Require Transpower and local electricity distributors to plan ahead to ensure resilience against future weather and climate disruptions.
- 2.5. Ensure the pricing and investment strategies of the national grid and local lines supports efficiency investments and load shifting, and facilitates distributed generation.

C. Consumer Protection

Policy Positions

- 2.6. Require the new Sustainable Energy Commission to develop industry best practice guidelines regarding smart meter installation, citizen data ownership and privacy protections.
- 2.7. Ensure customers can choose whether or not to have a smart meter at their property and require energy companies to gain explicit consent for installations well in advance of undertaking the work. We will further ensure that:
 - a) Customers who choose not to have a smart meter are not unfairly disadvantaged with respect to security of energy supply and charges for energy usage.
 - b) Customers who choose to have a smart meter retain full authority over the use of their smart meter data, for example by restricting it from being on-sold (as a default position), or by allowing free access to it from other retailers (if changing plans).
- 2.8. Introduce a retailer of last resort that is required to service medically dependent and vulnerable consumers.

3. Conserving and using all energy forms more efficiently

Energy efficiency and conservation are the fastest, cheapest and least environmentally damaging ways of increasing the energy available to us. Coupled with a greater awareness of how our own behaviour affects energy use, increasing energy efficiency can significantly improve our quality of life while reducing energy demand. Green policies on [Transport](#), [Environmental Protection](#), [Housing and Sustainable Communities](#), and [Economics](#) will all contribute to improved energy efficiency.

Policy Positions

- 3.1. Review the role of the Energy Efficiency and Conservation Authority (EECA) alongside the Sustainable Energy Commission and the broader energy governance system to ensure that there are no institutional barriers to a transition to a sustainable energy future.
- 3.2. Strengthen the role of the New Zealand Energy Efficiency and Conservation Strategy (NZECS) by increasing the targets, accelerating the timetables and putting the strategy into regulation and/or legislation.
- 3.3. Promote Government leadership by increasing the energy efficiency of its vehicles and buildings, with a focus on demonstrating what is possible, developing domestic capacity in the production and installation of new technologies and reducing costs for the rest of the economy.
- 3.4. Introduce mandatory energy efficiency standards for a wider range of appliances and machinery in line with international standards, and progressively raise these standards as technologies develop.
- 3.5. Work with the building industry and research organisations (such as BRANZ and EECA) to review existing building energy performance rating systems with a view to working towards a single system, and to phase-in the requirement for residential and commercial buildings to carry an energy performance rating when put up for sale.
- 3.6. Support locally based advisory services that provide free or low cost audits of homes' energy efficiency, energy conservation and renewable energy options.
- 3.7. Develop ongoing and expanded public information and community education programmes to improve energy literacy and drive energy efficiency and conservation. Involve well-trained community-based energy groups and advisors in the delivery of such programmes.
- 3.8. Develop a mechanism and a timeframe for retrofitting existing buildings to the current energy efficiency standards for new builds.

4. Realising the potential of renewable energy

The Green Party wants to accelerate the generation of renewable energy in order to meet climate change obligations and become less reliant on fossil fuels.

A. Supporting Wind Energy

New Zealand has an excellent wind resource. The combination of wind and hydro is particularly beneficial as water can be stored in the lakes when the wind is blowing

and used to generate power when it is not. Care is needed in choosing sites for wind farms.

Policy Positions

- 4.1. Develop national guidance on wind energy and provide planning assistance to district and regional councils, to enable them to provide sites suitable for wind farms in their plans whilst minimising impacts on local communities in advance of specific proposals.

B. Using the Sun

Solar energy is most effectively used as direct heat for water and space heating and increasingly for solar power using photo-voltaic panels.

Policy Positions

- 4.2. Provide low interest Government loans to enable affordable solar power installation and storage on New Zealand buildings, such as schools and marae, which are well-suited to solar energy use.
- 4.3. Set standards and provide guidance for achieving sustainable building design that ensure new buildings make use of solar energy and storage (see our [Housing and Sustainable Communities](#) policy).
- 4.4. Ensure that covenants cannot inhibit optimum solar design, including orientation of houses and location of external heating, ventilation and air conditioning (HVAC) units

C. Making Use of Wood and Other Biomass

Our plantation forests could become a major source of energy in the future, including eventually for transport fuel. Waste wood from plantation forests can be used in co-generation plants to provide process heat and electricity for industry, with some power exported to the national grid. Waste wood chip also offers a credible way of phasing out coal as an industrial fuel, for instance in large industrial boilers, as well as in hospitals, universities and schools. Dry wood pellets and fire logs are also an acceptable fuel for household space heating in a high efficiency wood stove and this can help cut the electricity peak load. Care is needed to ensure that crops grown especially for fuel produce more energy than is used in the process and that they do not take land out of food production on a significant scale. The Green Party will:

Policy Positions

- 4.5. Ensure research and development is undertaken to establish the potential for woody biomass and biofuels within New Zealand.

- 4.6. Review the Wood Processing Strategy, in partnership with the industry, to incorporate planning for fuel wood.
- 4.7. Compile an inventory of waste biomass materials suitable to make fuels and match this with local potential users.
- 4.8. Facilitate the development of a local wood pellet supply industry.
- 4.9. Introduce a national testing regime for wood stoves and wood burners that measures emissions, and work with NZ manufacturers to encourage the development of ultra-low emissions models (including wet backs).
- 4.10. Facilitate and encourage localised small-scale programmes to develop biofuels from waste.
- 4.11. Work with iwi and hapū to facilitate the use of iwi-owned forests and forestry waste for biomass.

D. Wave, Tide and Currents

New ways of capturing energy from the oceans with small modular turbines are being tested and show promise. However, turbines can be inappropriate in sensitive environments and can compromise local community values.

Policy Positions

- 4.12. Support funding of marine energy research and development, and assess the feasibility of New Zealand developing a leading edge role in this area.
- 4.13. Share decision-making with mana whenua in all matters relating to the marine environment.

E. Geothermal

Geothermal development for industrial process heat and electricity can be sustainable under some circumstances. It must be developed with care to ensure that natural thermal features are not disrupted, and that fluids are re-injected to deep wells so that heat and fluid are not depleted. Iwi and hapū connected to the resource, and their values, must be respected.

Policy Positions

- 4.14. Support sustainable development and use of geothermal energy, including direct heat uses.
- 4.15. Facilitate iwi and hapū involvement in the development and use of geothermal energy.

F. Hydroelectricity

Hydro provides the backbone of our current electricity generation system. The Green Party does not favour further large hydro plants because:

- Our system is vulnerable to dry winters already and we need to diversify away from hydro.
- Rivers are important habitats for wildlife and highly valued for recreation such as fishing and kayaking. We need to protect wild rivers from further development.

Policy Positions

- 4.16. Consider small hydro developments on their merits, where they can be built without significant damage to ecology or public values.
- 4.17. Involve iwi and hapū in the planning of small hydro projects, where these projects involve water resources within the rohe of the iwi or hapū.

5. The future of other energy sources

The Green Party supports a transition to renewable energy. Our views on oil and gas are described above. This section sets out our views on fuels not discussed elsewhere in this policy.

A. Hydrogen

Hydrogen is a way of storing and transporting energy, not a primary energy source in itself.

Policy Positions

- 5.1. Investigate the potential role of hydrogen as part of overall assessment of pathways to a sustainable energy future.

B. Nuclear power

New Zealand has clear policy against the use of nuclear power. Nuclear energy is expensive, hazardous and unnecessary.

Policy Positions

- 5.2. Continue to oppose the use of nuclear power.

C. Coal

Aotearoa New Zealand mines, imports and burns coal for electricity and industrial use. There is no way to reduce the greenhouse gas emissions from burning coal, which is the worst of the fossil fuels from a greenhouse gas perspective. The Green

Party believes that the best way to reduce emissions from coal is to leave it in the ground. More detail on our policies to reduce emissions can be found in our [Climate Change](#) policy.

Policy Positions

- 5.3. Phase out the extraction of coal, which is highly polluting (see our Mining Policy).
- 5.4. Design a mechanism to discourage export of coal when it is exported to a country which does not put a price on carbon.
- 5.5. Require and support existing coal users in industry and electricity generation to rapidly replace coal equipment and processes with renewable energy systems and energy efficient technologies and techniques.
- 5.6. Oppose any conversion of lignite or coal to other fuels or fertiliser.
- 5.7. Fund research and development into converting lignin and cellulose from wood into fuels and other products to replace oil and coal derived materials.