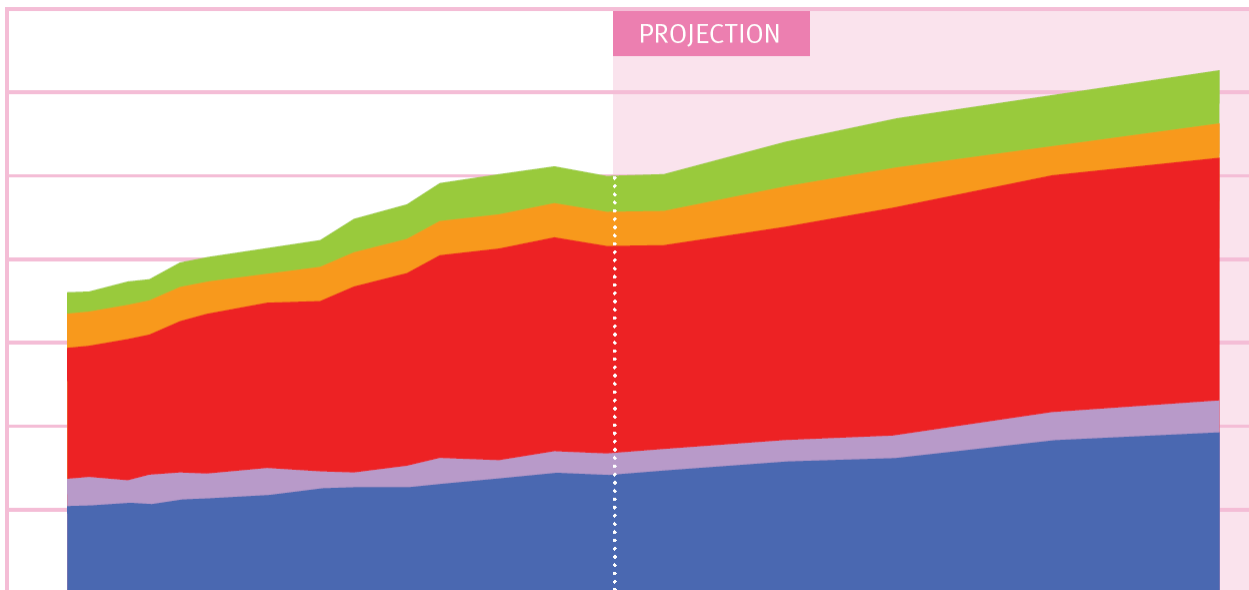


Bioenergy and the Energy Outlook



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What is the Energy Outlook?

- A semi-regular publication giving 25 year forecasts of energy supply, demand, prices and emissions
- *Reference Scenario* shows where things might go if current trends, policies and technologies prevail
- *Sensitivity Analysis* shows impact of changes in key external variables (GDP, emissions price, oil price)
- *Scenarios* test what could happen if we move away from current trends, policies technology mix



Why do we publish it?

- To inform energy stakeholders
- Energy and emissions forecasts critical to many energy policy issues – ETS, electricity market review, Kyoto protocol position, petroleum exploration
- Highlights emerging policy issues, without proposing policy interventions

Key themes from the Energy Outlook 2009

- Electricity prices increasing
- Biomass for heat grows faster than other sources, but remains small
- Emissions 40% above 1990 level by 2030
- Transport biggest contributor to increasing emissions
- Emissions pricing only really affects emissions from electricity generation
- Energy intensity continues to improve
- Energy demand grows with higher GDP

Bioenergy scenario development

- We have developed a scenario sees significant expansion in bioenergy supply and use
- Reflects information on potential and costs from:
 - Scion report
 - Biofuels producers
 - EECA
 - Ministry of Transport
- Results show that switching to bioenergy can greatly reduce emissions, and improve oil security
- BUT uptake won't just happen – economics only work at high oil/emissions prices, or with targeted policy measures

Bioenergy and current government activity

- Biomass for heat supported through targeted EECA programmes
- Biodiesel grants scheme in operation
- Well developed bioenergy Energy Outlook scenario
- MED increasing its bioenergy policy capability

A bioenergy strategy?

- Making best use of NZ's bioenergy potential fits well with current government's agenda of maximising the value of natural energy resources
 - A bioenergy strategy will highlight potential and show benefits
 - Will also identify barriers
- ⇒ *Challenge is to show the value proposition to invest or intervene*

www.med.govt.nz/energyoutlook