

93402R



# Scholarship 2016 Economics

9.30 a.m. Tuesday 15 November 2016

# RESOURCE BOOKLET

Refer to this booklet to answer the questions for Scholarship Economics.

Check that this booklet has pages 2–9 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.

Use **Resources A–E** to answer Question One.

#### **RESOURCE A: Transpower New Zealand**



In total,

the National Grid contains 11803 kilometres (7334 miles) of high-voltage lines and 178 substations.

Source (text, adapted): https://en.wikipedia.org/wiki/Transpower\_New\_Zealand Source (image): http://cdn.3news.co.nz/3news/AM/2013/8/16/309292/powerlines.jpg

# **RESOURCE B: Transpower regulations**

The Commerce Commission is the New Zealand Government's competition enforcement and regulatory agency.

When regulating prices for Transpower,

the Commerce Commission considers the following factors:

- making sure that suppliers have profit incentives to innovate and invest in their infrastructure
- delivering services efficiently and reliably at a quality that consumers expect, while limiting businesses' ability to earn excessive (supernormal) profits.

 $Source\ (adapted): http://www.scoop.co.nz/stories/BU1405/S00553/commerce-commission-draft-decision-on-transpower-expenditure.htm$ 

# **RESOURCE C: Transpower lifts profits and payout to Government**

State-owned national grid company Transpower has returned almost \$190 million to the Government in the past year, as profits grew.

The total dividend to be paid to the Crown for the 2014–15 financial year is \$188 million, up from \$151 million last year.

Source (adapted): http://www.stuff.co.nz/business/71552672/transpower-lifts-profits-and-payout-to-government

# **RESOURCE D: State-Owned Enterprises Act**

A state-owned enterprise is a government-owned company created under the State-Owned Enterprises Act 1986. The act says that the principal objectives of a state-owned enterprise are to:

- be "as profitable and efficient as comparable businesses that are not owned by the Crown"
- be "a good employer"
- exhibit "a sense of social responsibility".

Source (adapted): http://www.teara.govt.nz/en/state-owned-enterprises/page-3

# **RESOURCE E: Price regulation options**

Common price regulation options for monopolies are typically:

- average cost pricing
- marginal cost pricing.

Use **Resources F–K** to answer Question Two.

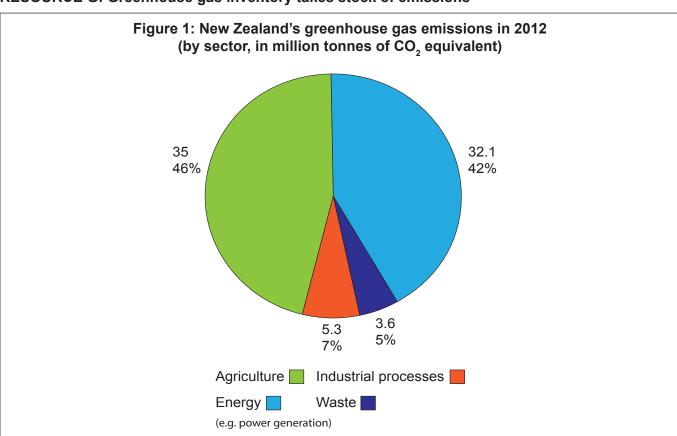
# **RESOURCE F: What is climate change?**

Earth's atmosphere is made up of mostly oxygen, a large amount of nitrogen, and a small percentage of greenhouse gases.

Limiting climate change will require substantial reductions of greenhouse gas emissions.

Source (adapted): http://mfe.govt.nz/climate-change/overview-climate-change/about-climate-change

# RESOURCE G: Greenhouse gas inventory takes stock of emissions

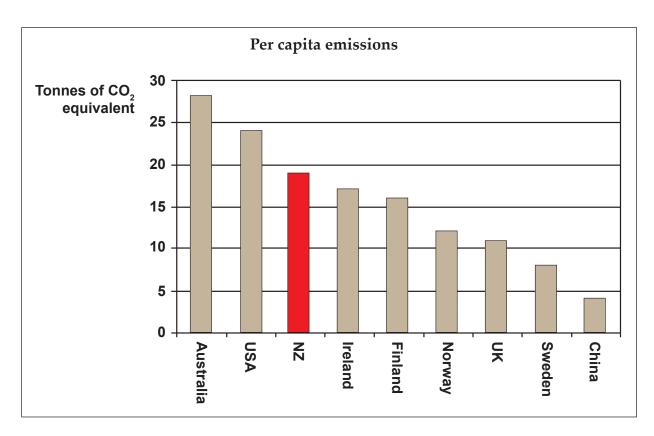


The Ministry for the Environment has issued its official annual report of human-caused emissions of greenhouse gases in New Zealand.

 $Source\ (adapted): http://www.sciencemediacentre.co.nz/2014/04/11/greenhouse-gas-inventory-takes-stock-of-emissions/$ 

# **RESOURCE H: The global commons**

The atmosphere surrounding Earth that enables life to exist is a "global commons" into which producers have been able to release pollution and wastes.



We, as New Zealanders, do not have anywhere near a perfect emissions record. This graph illustrates that New Zealand's emissions, on a per-capita basis, closely follow big emitters like Australia and the United States and are almost twice as much as the UK and nearly five times as much as China.

Text source (adapted): http://www.treasury.govt.nz/publications/media-speeches/speeches/climatechangechallenge Image source: World Resource Institute (WRI)

#### **RESOURCE I: Cutting greenhouse gases**

There are many possible ways to cut greenhouse gases, including a carbon tax, emissions trading schemes, improvements to energy efficiency and vehicle fuel economy (so less energy has to be produced) through regulations or subsidy, increases in wind and solar power, hydrogen produced from renewable sources, biofuels (produced from crops), and natural gas.

Increasing forestlands by providing financial incentives to owners and making changes to the way we farm could increase the amount of carbon we're storing.

Source (adapted): http://environment.nationalgeographic.com/environment/global-warming/gw-solutions/

#### **RESOURCE J: Carbon taxes**

Carbon tax is a form of pollution tax. It charges a fee on the production, distribution, or use of fossil fuels based on how much carbon their combustion emits. The Government sets a price per tonne on carbon, then translates it into a tax on electricity, natural gas, or oil / petrol. Because the tax makes using fossil fuels more expensive, it encourages power companies, businesses, and individuals to reduce consumption and increase energy efficiency. Carbon tax also makes alternative energy more cost-competitive with greenhouse gas-emitting fuels like coal, natural gas, and oil.

Source (adapted): http://science.howstuffworks.com/environmental/green-science/carbon-tax.htm

# **RESOURCE K: Carbon emissions trading**

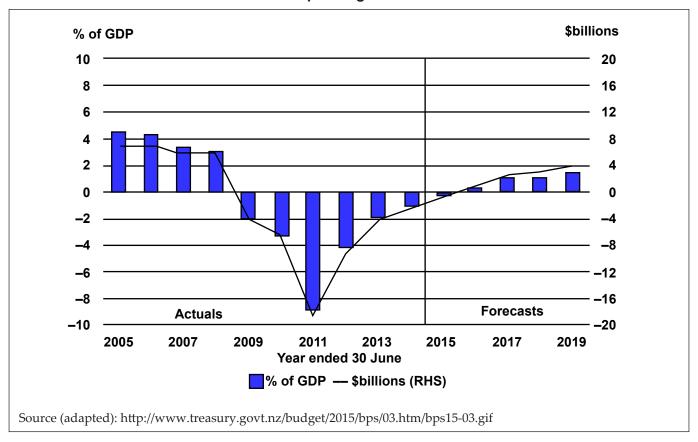
Emissions trading is a market-based approach for reducing emissions of greenhouse gases.

Note that

although the agricultural sector, especially dairy, is a large greenhouse gas emitter, there is debate in New Zealand as to whether the agricultural sector should be included in such a scheme because of the impact on farmers.

Sources (adapted): http://www.epa.govt.nz/e-m-t/Pages/About-ets.aspx http://science.howstuffworks.com/environmental/green-science/carbon-trading.htm Use **Resources L-Q** to answer Question Three.

#### **RESOURCE L: New Zealand Government operating balance**



#### **RESOURCE M: Government announces tax cuts for 2017**

8 September 2014 – The Finance Minister says income tax cuts will begin taking effect from 2017 – economic conditions allowing – by which time the Government will have \$1.5 billion a year free cash to allocate both to those cuts and also to debt repayment.

Of the \$1.5 billion set aside by 2017, about \$1 billion would go to tax cuts, and the rest would go towards debt reduction. That would put New Zealand in a much better position to withstand any future economic shocks or natural disasters, said the Finance Minister.

Source (adapted): http://www.nzherald.co.nz/nz/news/article.cfm?c\_id=1&objectid=11320903

# **RESOURCE N: Tax cuts premature?**

The opposition finance spokesman said talk of tax cuts was premature: "What we need to see is investment in growing jobs and growing a sustainable economy and keeping our regions going. Looking at tax cuts is getting way ahead of themselves."

He said that under the Government's economic plan, New Zealand would not begin paying down \$60.6 billion net debt until 2019 or resume contributions to the New Zealand Superannuation Fund until 2021.

Source (adapted): http://www.nzherald.co.nz/economy/news/article.cfm?c\_id=34&objectid=11529248

# RESOURCE O: Got a surplus – how about some growth?

	would mean virtually zero in per capita terms.
- 1	Countries (such as New Zealand), which are not fiscally constrained and which significantly rely on net external demand, should ease their fiscal stance in the near term, especially
	chrough increased infrastructure investment, the IMF says.
5	Source (adapted): http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11530241

# **RESOURCE P: Use surplus for benefit of everyone**

The surplus is worth celebrating, but it would be wrong to give it away in tax cuts, even if it
proves to be sustainable.
There is no limit to the worthy social programmes that could use the surplus, but its best use is to strengthen the economy that generates the taxes that support the welfare of us all.
Source (adapted): http://www.nzherald.co.nz/opinion/news/article.cfm?c_id=466&objectid=11530389

# **RESOURCE Q: The New Zealand Superannuation Fund**

The New Zealand Superannuation Fund is a government wealth fund in New Zealand. The purpose of the fund is to partially pre-fund the future cost of the New Zealand Superannuation pension, which is expected to increase substantially as a result of New Zealand's ageing population. Government contributions were funded from the Government budget. The New Zealand Government has contributed \$14.88b to the fund to date. In 2009, the National Government suspended payments to the fund as recession led to government budget deficits.

Source (adapted): https://en.wikipedia.org/wiki/New\_Zealand\_Superannuation\_Fund