### Conclusions and Recommendations of APEC Peer-Review Panel

APEC IFFSR Peer Review Panel March 2015 Wellington, New Zealand





Asia-Pacific Economic Cooperation

### Toward a comprehensive review of subsidies



Identifying all policies or measures that may provide some form of support is the first step in any review of subsidies:

- Finding a commonly agreed definition of subsidies has proven a major challenge.
- Identifying which specific fossil-fuel subsidies are —"inefficient" and —"encourage wasteful consumption" requires understanding the circumstances of each country, and the impact of the different subsidies in use.
- Subsidies can take many forms either on the consumer or producer side.

### The OECD concept of "support"



Asia-Pacific Economic Cooperation

		Statutory or Formal Incidence (to whom and what a transfer is first given)					
		Direct con Unit cost of consumption	sumption Household or enterprise income	Output returns	Enterprise income	Cost of intermediate inputs	Costs of production factors
Transfer Mechanism (how to transfer)	Direct transfer of funds	Unit subsidy	lifeline electricity	for	Operating grant to coalmining company	electricity used in mining	Capital grant linked to acquisition of mining-related capital
	Transfer of risk to government	Price-triggered subsidy	cold-weather	Govt. expenditure on coal buffer stock	•	Security guarantee for coal trains	Credit guarantee linked to acquisition of mining-related capital
	Tax revenue foregone	Excise-tax concession on fuel	TTax deduction for energy purchases that exceed given share of income	Production tax credit for liquid fuels from coal	Reduced rate of income tax on coal-mining companies	Reduction in excise tax on fuel used for mining	Tax credit for investment in mining equipment
	Other government revenue foregone	Under-pricing of access to a natural resource harvested by final consumer		Reduced royalty payments on access to coal deposits		govt service or access to a natural	Under-pricing of access to govt. land used for storage of coal
VSIS OF TH	Induced transfers	Regulated price or cross subsidy	lifeline electricity rate	•	Monopoly concession to coal company	Export restriction on domestically produced coal	Wage controls on mining labour

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## The scope of the APEC peer-review of New Zealand



On the basis of the OECD Inventory of measures supporting fossil fuels, **New Zealand** selected **eight measures** for consideration in the peer-review:

- Non-resident off-shore drilling rig and seismic ship tax exemption
- Three tax deductions for petroleum-mining expenditures
- Petroleum tax and royalty regime
- R&D funding for the oil industry
- Financial restructuring of Solid Energy
- Indemnity for mining land reclamation
- Motor spirit excise duty refund
- Funding of international treaty obligations to hold oil stocks

### **APEC Panel Peer-Review**

- This review focused on the **eight measures** that have been identified by the New Zealand Government.
- The Peer Review Panel determined whether these instruments as implemented in New Zealand constituted inefficient subsidies that resulted in wasteful energy consumption.
- This review follows the APEC guidelines for the peer review of fossil-fuel subsidies and used the template provided by the Secretariat (VPR/IFFSR).

### Meetings conducted for the APEC peer-review



- Ministry of Foreign Affairs and Trade (MFAT)
- Ministry of Business, Innovation and Employment (MBIE)
- Inland Revenue Department (IRD)
- Treasury
- Ministry of Transport
- New Zealand Petroleum & Minerals (NZP&M)
- Stakeholders from the private sector (PEPANZ)

## Measures relating to the supply of hydrocarbons



Of the eight measures selected by New Zealand, four relate directly to **the supply of oil and natural gas**:

- Non-resident off-shore drilling rig and seismic ship tax exemption
- Three tax provisions for petroleum-mining expenditures
- Petroleum tax and royalty regime
- R&D funding for the oil industry

# Non-resident off-shore drilling rig and seismic ship tax exemption



- The measure seems to help correct a distortion in the tax system that is caused by a special rule in New Zealand's Double-Tax Agreements (DTAs); and, is consistent with New Zealand's approach to taxation.
- Tax provisions are designed to prevent 'churning' or cycling of equipment.
- Fiscal impact is neutral or slightly positive.
- The measure is reviewed every five years and does have currently an expiration date of 2019.

#### Findings:

- By reducing the cycling of rigs and seismic ships, the measure avoids unnecessary costs, including additional fuel consumption, and the resulting greenhouse gas emissions.
- Continue to review provisions every five years based on activity with a lead-time of at least a year.

# Tax deductions for petroleum-mining expenditures



- The three measures for exploration and development expenditures are broadly consistent with New Zealand's general tax practices across all sectors of its economy.
- However, there is an asymmetry in the treatment of development expenditures since long-lived projects (> 7 years) can be amortised over a 7-year period rather than over the life of the asset.
- These measures have no definite date of termination.

### Findings:

- While these measures may serve to increase future production of fossil fuels, they are unlikely to affect consumption through lower oil prices since New Zealand is a price taker on world markets.
- The measures may, however, increase energy security and reduce the country's import bill.

### Temporary reduction in royalty regime rate



#### Initial observations:

- This policy was introduced in response to a concern over the downward revision of reserves in the Maui gas field.
- It applies only to fields discovered between 2004 and 2009 (two fields: Turangi and Kowhai).
- Petroleum royalties are designed to capture the economic rent, or the super profit, from petroleum extraction; and, royalties are, by definition, over and above conventional taxation.
- The government decided not to extend the measure after 2009 in light of its limited effects.

### Findings:

- Prior to 2004, New Zealand already had among the lowest royalty rates (top 10 according to Ministry officials) but this was not enough to induce more oil and gas exploration.
- Modelling by government agencies concluded that the royalty reduction had little to no effect on discoveries and created substantial tax revenue losses (> USD 70 million or > NZD 94 million).

### **R&D** funding for the oil industry

#### Initial observations:

- The measure helps generate a basic understanding of New Zealand's geology that is subsequently made publicly available.
- Publicly available information fosters transparency and helps attract investment into the development of the country's natural resources.
- Information gained has been used for a wide range of other activities.
- The measure is justified in terms of the public-good nature of geological information and data.
- Currently, this measure is only funded until June 30, 2018.

#### Findings:

- If the data were to induce more fossil-fuel production in New Zealand, it would be unlikely to affect world market prices.
- To the extent the geological data collected are a public good, then government intervention is justified.

## Conclusions and recommendations for measures relating to O&G supply



#### Conclusions

- The four measures relating to the supply of oil and natural gas are not considered inefficient subsidies that encourage wasteful consumption of fossil fuels.
- New Zealand is a small producer and a net importer. Increased production from New Zealand is therefore unlikely to affect prices on world markets and increase consumption.
- These measures do help, however, to improve the country's energy security, but only to a limited extent given the specifics of New Zealand's resources (e.g. remoteness and geological conditions).

#### Initial recommendations:

 Review on a regular basis the effectiveness and usefulness of the various measures in terms of their impacts on exploration and production.

### Measures relating to state-owned enterprises



### Of the eight measures selected by New Zealand, two involve assistance to state-owned Solid Energy:

- Financial restructuring of Solid Energy
- Indemnity for mining land rehabilitation

# Government assistance to Solid Energy



### Initial observations:

- The Government has already helped Solid Energy twice in the recent past alongside a commercial debt compromise between the company and its private sector lenders.
- Several of the company's mines are located on the West Coast of the South Island, which is a region with low economic activity and few employment opportunities.
- At the time of the peer review, the company seemed to require coal prices of at least USD130 per tonne to be viable. Current prices are around USD 70 per tonne.
- Power generators or other entities remain free to buy imported coal or domestic coal at market prices.

### Findings:

 More data would be needed to evaluate the impacts on production costs but impacts on consumption are presumably low.

# Indemnity for mining land rehabilitation

### Initial observations:

- Solid Energy is required by various pieces of legislation controlling its mining activities to rehabilitate to an agreed condition the land on which its mining activities occur.
- The NZ Government agreed to indemnify Solid Energy for the end of mine life rehabilitation costs (including water) relating to mining activities prior to September 30, 2014. It does not cover rehabilitation costs arising from mining activities carried out after that date.
- The indemnity had an estimated present value of NZD103 million as of September, 2014-and improved the company's balance sheet by that amount.

#### Findings:

 More data would be needed to evaluate the impacts on production costs but impacts on consumption are presumably low.

## Conclusions and recommendations for measures relating to Solid Energy

#### Conclusions

- Government assistance to Solid Energy does not constitute an inefficient subsidy that encourages wasteful consumption.
- Government assistance to improve Solid Energy's balance sheet does not effect domestic coal prices to end-users.

#### Initial recommendations:

- Continue restructuring the company's operations to reduce unit costs.
- Otherwise, further assistance may divert resources away from more productive areas of the economy.

### Measures relating to the consumption of fossil fuels



Of the eight measures selected by New Zealand, two relate to the **consumption of fossil fuels**:

- Motor spirit excise duty refund
- Funding of international treaty obligations to hold oil stocks

### Motor spirit excise duty refund

#### **Initial observations:**

- Excise-duty revenues are entirely earmarked for road construction and maintenance, i.e., a user's tax for roads.
- The refund focuses on off-road vehicles, mostly tractors and harvesters in the farming sector and commercial vessels.
- Eligible users of fuel need to file an application.

### Findings:

- The measure is coherent within the broader context of the country's motorfuel taxation, with user charges on on-road diesel-powered vehicles also earmarked for road construction and maintenance.
- Total revenues from the excise duty amount to about NZD 1.5 billion (USD 1.12 billion) while total refunds account for around 2-3%.
- There are instances of fraud in the registration of eligible vehicles, such as where non-farm vehicles (e.g. motorcycles, automobiles) benefit from the measure, but they are modest.
- Monitoring and better data may be needed to streamline refunds.

## Conclusions and recommendations for the excise-duty refund

#### Conclusion

- Considering the purpose and the magnitude of the refunds, *this measure* does not constitute an inefficient subsidy that encourages wasteful consumption.
- Over-all the excise-duty raises prices of motor fuels to the beneficiaries of expanded or well-maintained road infrastructure.

#### Initial recommendations:

- Better target the refunds by reviewing eligible vehicle types and fuels on a regular basis or placing a cap on each recipient.
- Collect more data to enable an analysis of the impacts of fuel prices on the consumption of the agriculture sector and other off-road users.
- Review on a regular basis:
  - □ the effectiveness of the measure;
  - and the broader question of tax rates and incentives for fuel efficiency (maybe as part of the revision of the GPS).

# Funding of international treaty obligations to hold oil stocks



### Initial observations:

- The Government is required to hold stocks for 90 days of net imports as part of its IEA treaty obligations.
- This requirement is partially met using emergency ticket contracts for purchasing oil abroad at current market prices.
- Tickets are now financed through higher levies on refined products (NZD 0.110 cents per litre or USD 0.082 per litre).

### Findings:

- Meeting the IEA treaty obligation through ticket purchases appears a less expensive option than holding the stocks physically.
- NZ commercial operators contribute to between half of the requirement to the entire requirement in some years.
- The levies for financing tickets are akin to a user fee and raise the price of petroleum products to beneficiaries of oil security.

# Conclusions and comments on the obligation to hold stocks



### Conclusions

- This measure is not an inefficient subsidy that encourages wasteful consumption.
- It results from a binding treaty obligation, which is now met through a user fee.
- No clear impact on consumption could be identified.

#### Additional comments:

- Collective stockholding, even in the context of widely available supply, mitigates the potential market power of oil-producing countries, and does not constitute support of market prices.
- Releasing stock during major international disruptions helps to moderate extreme oil price spikes.
- Modifying the obligation is beyond the sole control of New Zealand, and would require negotiations with other IEA countries.

### **Overall conclusions**

- The Peer Review Panel did not identify any inefficient subsidies that encourage wasteful consumption in the eight measures selected by the New Zealand Government.
- The Panel has, however, made a few recommendations that the New Zealand Government may wish to consider.
- In particular, the New Zealand Government may wish to undertake periodic reviews of :
  - the incentives provided by the tax regime applicable to oil and gas exploration and production;
  - government assistance to Solid Energy;
  - the excise-tax system for motor spirits.

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