

# **Petroleum security**

National Lifelines Forum 2013

# **Policy**

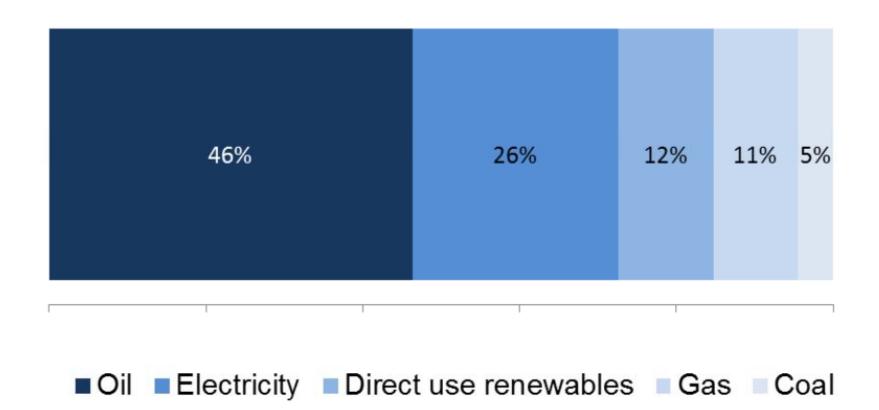
- " Energy market policy
- " Electricity, gas, oil
- " Public policy
- " Energy security

### Why the interest?

- " Increased interest in impact of extreme events
- " Is our approach still the right?
- " Government objectives:
  - . More competitive and productive economy
  - . Secure and affordable energy
  - . Resilient infrastructure

### Why the interest?

### Energy consumption by fuel - 2011



## Policy approach

1. Issue Identification, priority setting and policy dev. Monitoring & Evaluation Consultation, The Policy refinement Process and approval 3. Policy implementation

### Oil supply disruption

- Distinction between disruption in New Zealand market and disruption in international market
- International: Disruption outside NZ that would result in global oil price spike
- <u>Domestic:</u> Disruption to NZ supply chain supply shortfalls

### **International Energy Agency**



- Collective stockholding by oil consuming countries
- " Release stock during severe international disruptions
  - . Moderates extreme oil price spikes

"NZ obligation: contribute 90 days of net oil imports to stockholding

## **Triggers**

Triggers of IEA measures:

- Extreme weather
- Civil unrest
- " Unforeseen technical problems

# **Triggers**

### " Examples

. 1991: Gulf War – voluntary demand restraint and supply boost

. 2005: Hurricane Katrina

. 2011: Libya



#### **Member countries**

- " 28 members
- " Must be OECD member



- " Must have:
  - . a demand restraint programme
  - . legislation necessary to operate IEA's coordinate emergency response measures
  - . Information reporting

#### How it works for NZ

- "Stocks held by industry in supply chain count towards obligation
- Balance is Government responsibility
- "Gov holds options to purchase oil stock "oil tickets"
  - . Stocks held overseas
  - . Release or purchase
- " International Energy Agreement Act 1976
- Petroleum Demand Restraint Act 1981

## **Domestic oil security**

- " Focus on supply-side
- Minimise supply shortfalls from domestic infrastructure disruption
  - . Balancing with cost
- " High impact low probability events

#### **Current mechanisms**

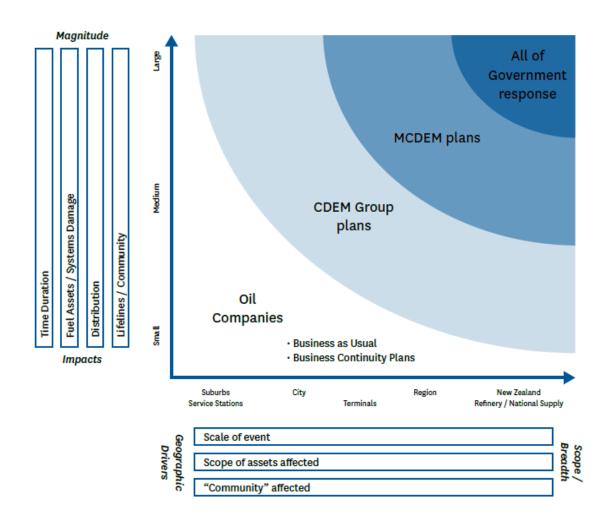
- " National Emergency Sharing Organisation (NESO)
- " MBIE: oil supply security
- " MCDEM: contingency planning petroleum sector
- Oil Emergency Response Strategy







#### **Current mechanisms**



## **Current mechanisms**

Sector/Agency	Planning Roles and Responsibilities
Lifeline Utilities (includes fuel sector)	Be able to function to fullest possible extent in an emergency, albeit at a reduced level.
	Have arrangements with fuel suppliers to get priority in an emergency.
	Participate in CDEM planning and exercises on an ongoing basis.
	Have continuity plans in place for organisation and sector.
	Provide technical advice to CDEM.
Service Stations	Maintain Business Continuity Plans to ensure continued operation.
	Maintain plans to access power backup in an emergency.
	Test arrangements as part of CDEM exercises.
CDEM agencies	Maintain national/regional CDEM fuel contingency plans.
	Identify national/regional CDEM Critical Fuel Customers and priorities.
	<ul> <li>Support fuel sector and Local Authorities, as required for regional fuel distribution disruptions.</li> </ul>
MED	Maintain the Oil Emergency Response Strategy.
	Manage and coordinate govt response to national fuel supply disruption.
	Convene and chair NESO.

#### Some conclusions

- " NZ fuel supply network is reasonably robust
- " Industry adept at responding to most supply disruptions
- " Already processes in place to manage severe disruptions
- No need for significant capital expenditure by gov in oil supply network

#### **Non-starters**

- " Options from consultation that didn't make the cut:
  - " Increased domestic stockholding low net benefit
  - International agreements to access fuel quickly in emergency unlikely to be effective
  - Protect future expansion at Wiri fuel terminal addressed through RMA
  - Pre-emptively approve Australian fuel specifications for emergency current approach more flexible
  - Requirement for additional trucking capacity low net benefit
  - New fuel terminal in West Auckland low net benefit

### Implementation – measures to progress

- " High productivity motor vehicle routes
- Oil contingency handbook
- " Technical analysis preemptive planning of RAP/WAP bypass?
- " Public information on fuel stocks and storage
- Back-up electricity at service stations
- " Hazard prevention and response
- Oil security working group

## Oil security group

- National Lifelines Committee
- Producers and distributors
- Consumers including major fuel customers
- " Government agencies MOT, NZTA, MCDEM

## Oil security group – likely work streams

- Oil contingency handbook
- " High productivity motor vehicle routes
- Preemptive planning of RAP/WAP bypass
- " Fuel stocks and storage information

## Oil security handbook

- Outline responsibilities
- Procedures in the event of an oil supply disruption greater clarity
- " How can industry and agencies collaborate best?

### Gas disruption study

- Risks, implications and risk management of a major disruption in the natural gas supply chain
- "Builds on and extends 2009 analysis by Centre for Advanced Engineering
- Interested in vulnerabilities, impact of regulatory framework on security of supply, adequacy of current practices to mitigate risk
- " High impact low probability events

# Gas disruption study



- Pipelines
- Productions stations
- " Wells/platforms
- " Distribution systems
- " Regulations

## Gas disruption study



"Excellent! So that's all agreed, then! All we need do now is draft the consultation document."

Consultation paper....

...stay tuned.

Lifeline groups can add value