

ENERGY SECURITY

6th SOUTH EAST EUROPE ENERGY DIALOGUE

Thessaloniki, May 30th & 31st, 2012

ENERGY SUPPLY SECURITY

iea

Thea KHITARISHVILI
Global Energy Dialogue
International Energy Agency



International
Energy Agency

The International Energy Agency

28 member countries



Australia



Austria



Belgium



Japan



Czech Republic



Denmark



Korea



Finland



France



New Zealand



Greece



Germany



Canada



Hungary



Ireland



United States



Italy



Luxembourg



Norway



The Netherlands



Poland



Switzerland



Portugal



Slovakia



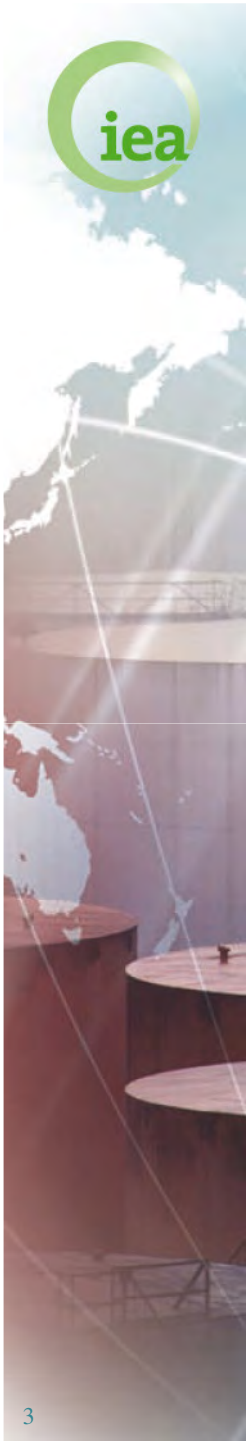
Turkey



Sweden



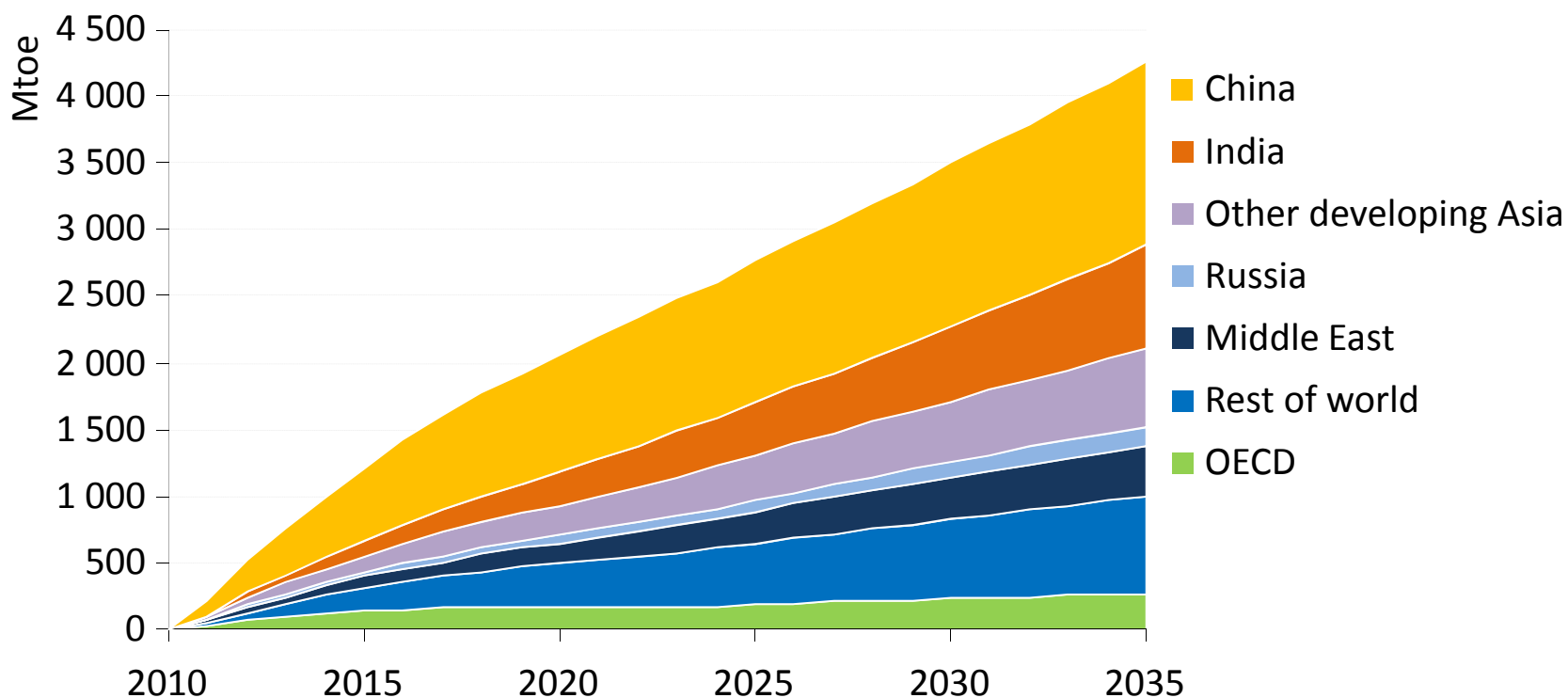
United Kingdom



Oil Market Outlook

Emerging economies continue to drive global energy demand

Growth in primary energy demand in the New Policies Scenario

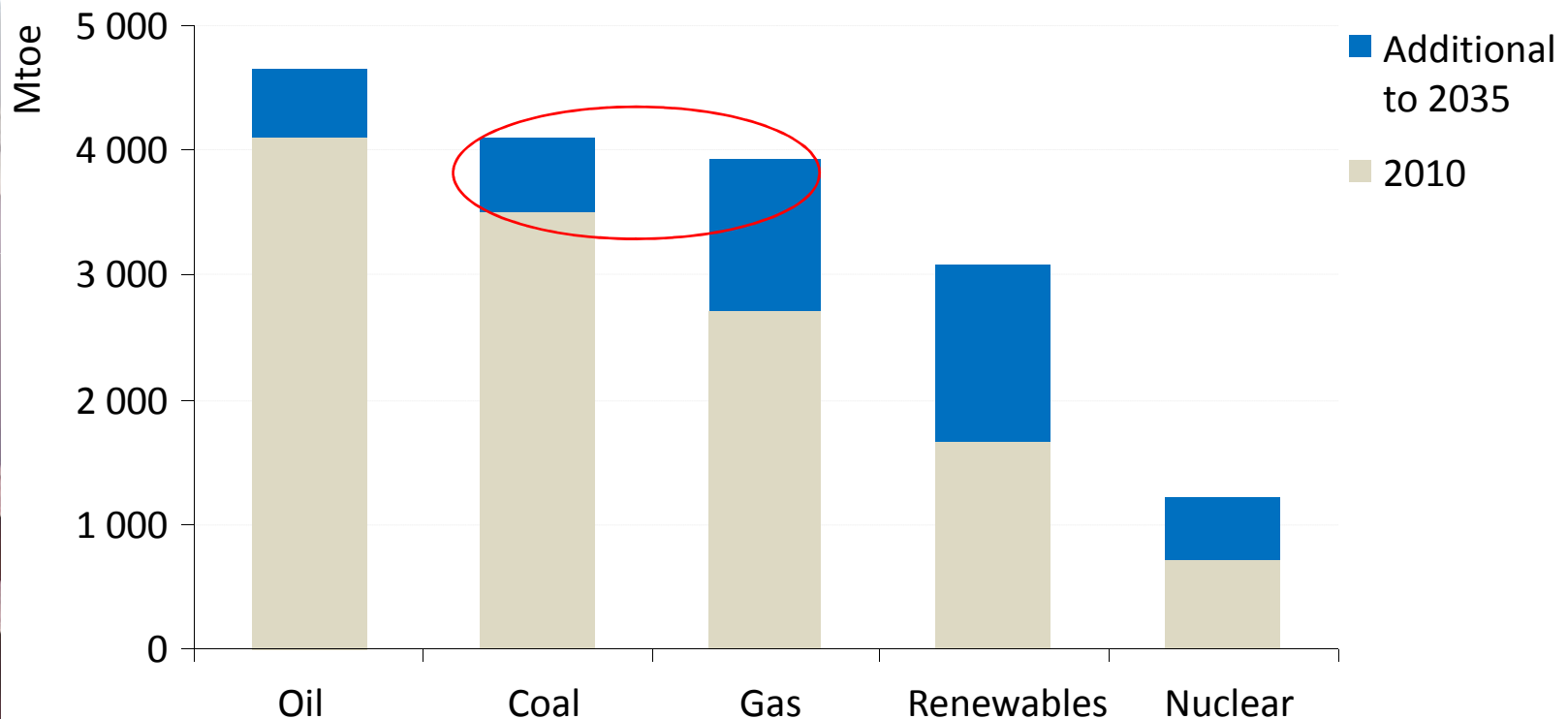


Source: WEO 2011

Global energy demand increases by one-third from 2010 to 2035, with China & India accounting for 50% of the growth

Natural gas and renewables become increasingly important

World primary energy demand

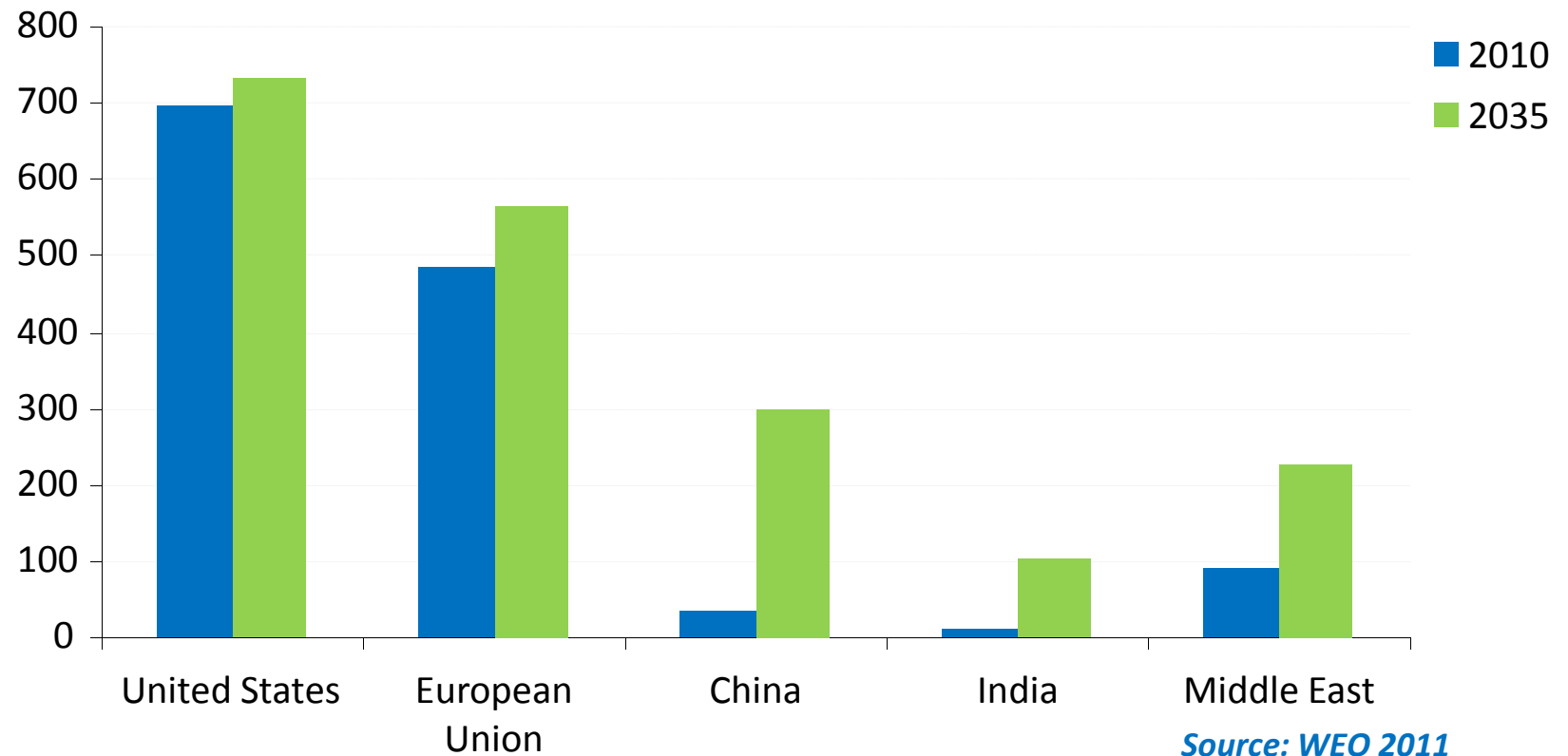


Source: WEO 2011

Renewables & natural gas collectively meet almost two-thirds of incremental energy demand in 2010-2035

Oil demand is driven higher by soaring car ownership

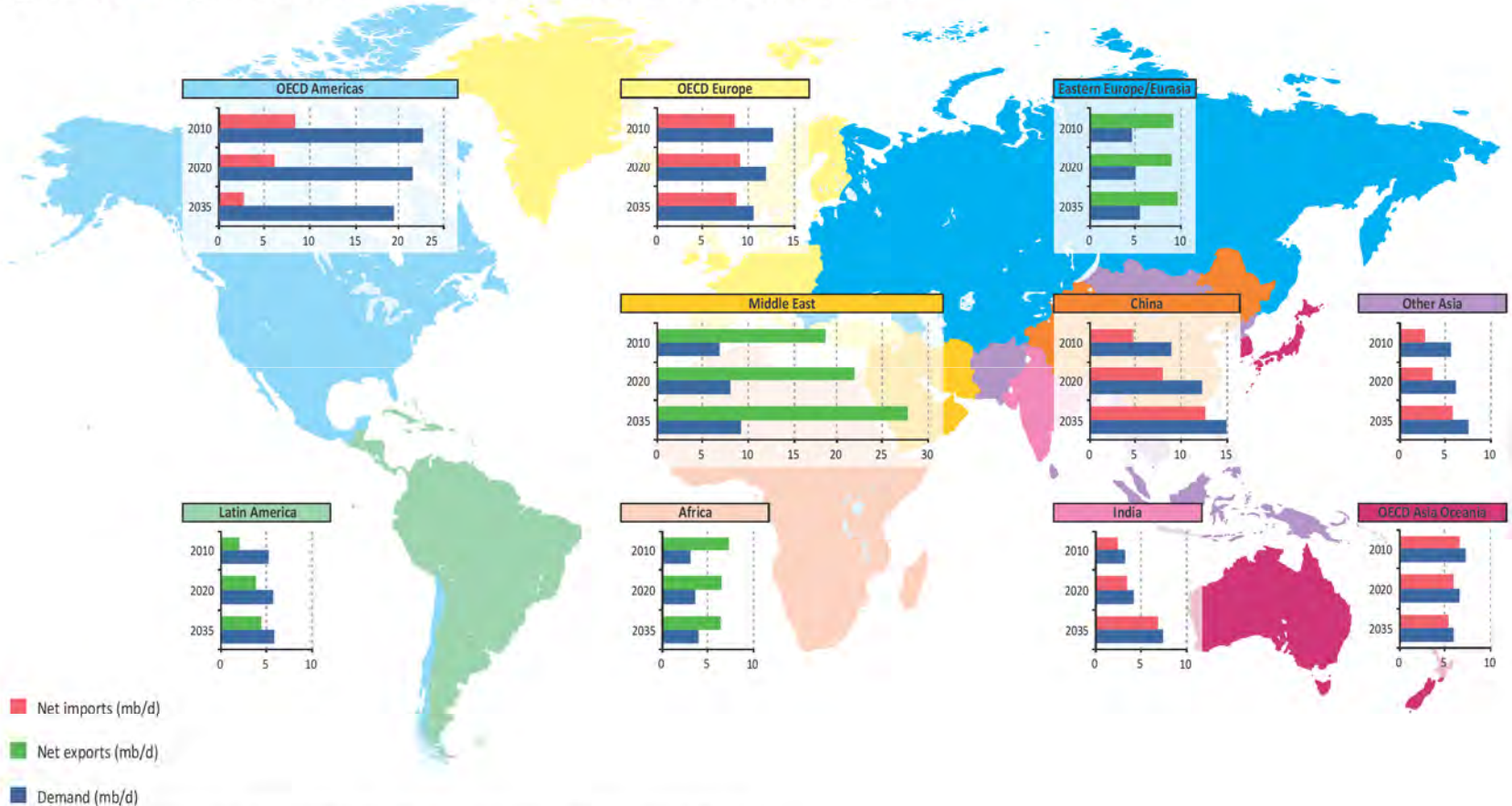
Vehicles per 1000 people in selected markets



The passenger vehicle fleet doubles to 1.7 billion in 2035; most cars are sold outside the OECD by 2020, making non-OECD policies key to global oil demand

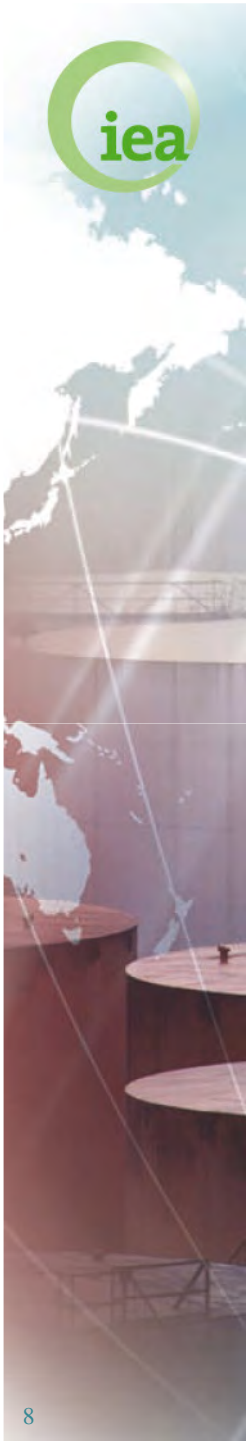
Changing oil import needs are set to shift concerns about oil security

Figure 3.19 • Regional oil demand and net trade in the New Policies Scenario (mb/d)



This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map.

Notes: Imports and exports show net volumes traded. International marine and aviation fuel use is not included.



Emergency Response

Impetus to establish the IEA

1973/74 oil crisis

- **Avoid competition for limited supplies**
 - **“Go-it-alone”, uncoordinated policy ineffective**
- **Coordinated action**
 - **Mechanism for emergency response**
- **Safety net**
 - **Oil stocks ≥ 90 days of net oil imports**
 - **Demand restraint measures (7-10%)**

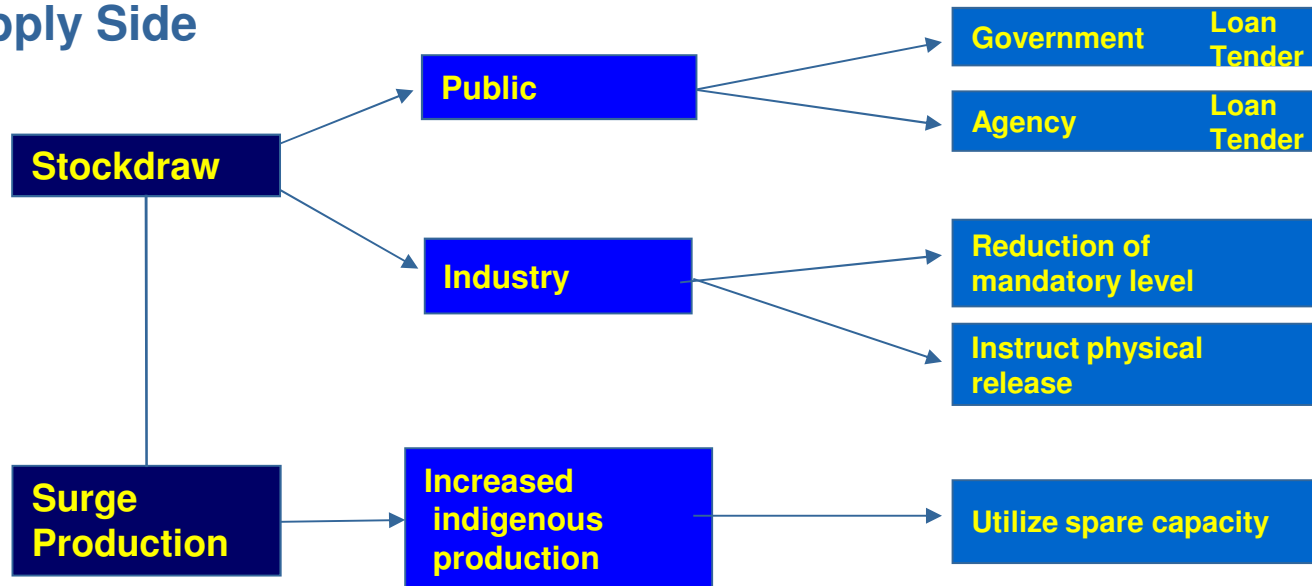


IEA Stockholding Obligation

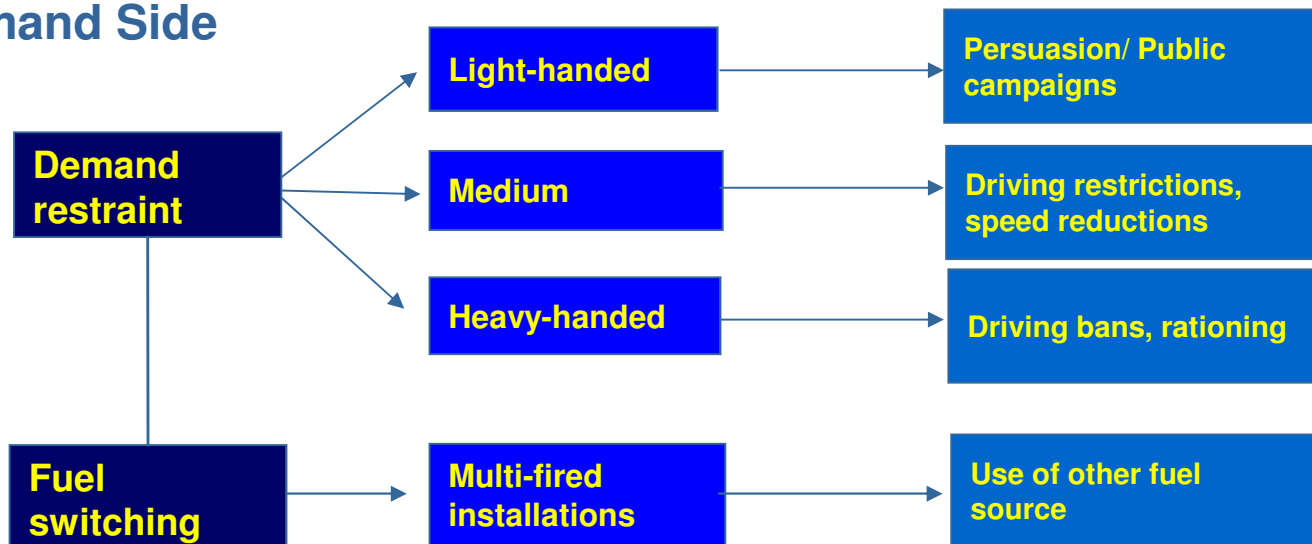
- **Total oil stocks cover at least 90 days**
 - Net-imports of previous year
 - Crude and refined product
- **The calculation**
 - Excludes marine bunkers and naphtha
 - Deducts 10% for unavailable stocks
- **Main types of stocks excluded:**
 - Oil not yet produced
 - Stocks held in pipelines, tankers at sea, in service stations, retail stores, military stocks

Emergency Response Measures

Supply Side

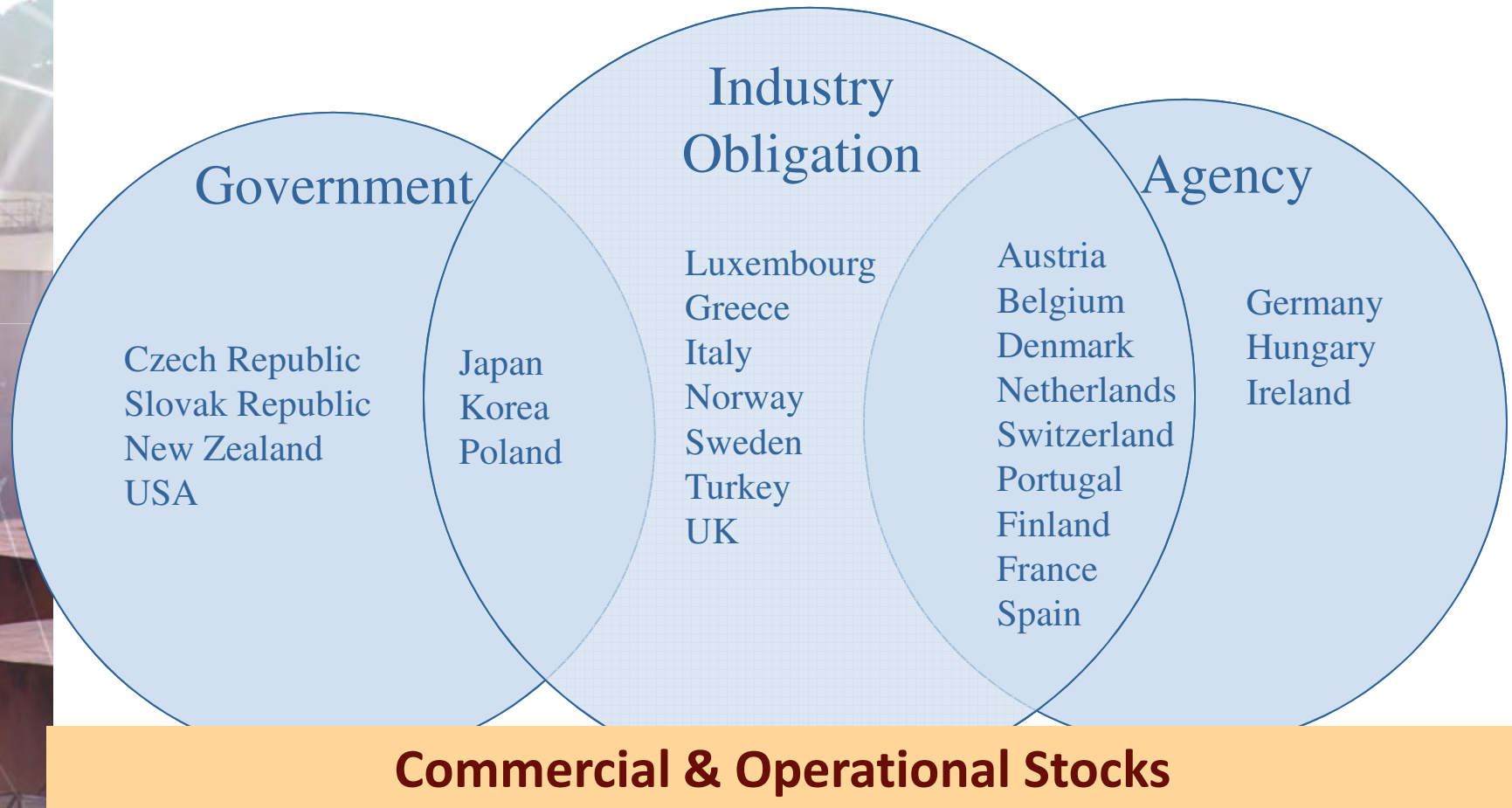


Demand Side



Stockholding Options

Different Stockholding Structures in IEA Countries

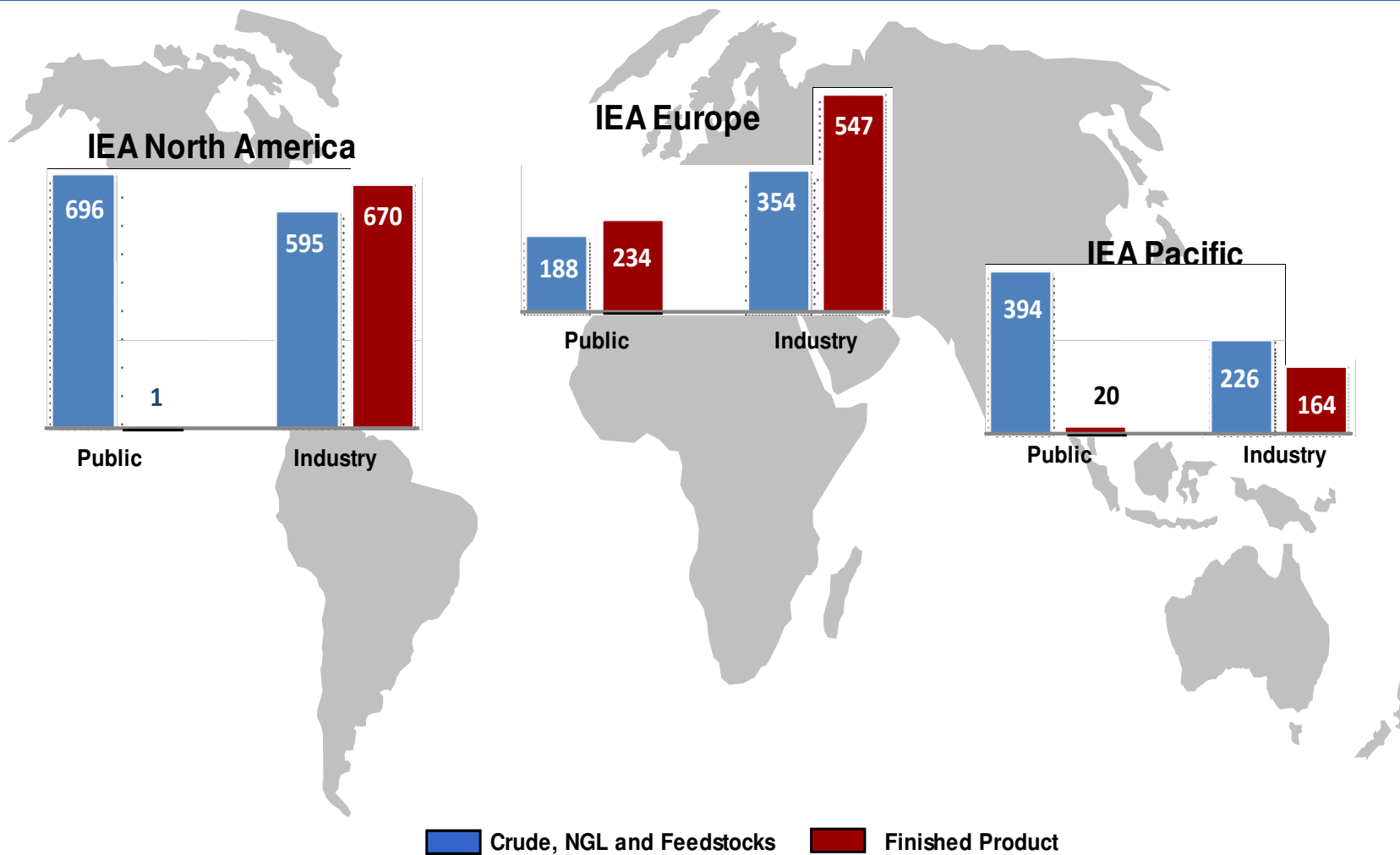


Government & Agency = Public Stocks

Stockholding in IEA Regions

IEA Total Oil Stocks at end December 2011

Million Barrels



Unit: million barrels



Initial Contingency Response Plan

- **Initial action**
 - ❑ Pre-agreed process to enable a swift, “first reaction” (i.e. 30 days)
 - ❑ Creates time for considering further action
- **Step by step procedure**
 - ❑ Market assessment of disruption
 - ❑ Proposal for action (total volume)
 - ❑ Rapid consultation – seeking consensus within 24/48 hours
 - ❑ Public announcement
 - ❑ Activation of measures within 15 days
- **Flexibility**
 - ❑ Focus on use of stocks, other measures possible
 - ❑ Make oil available to market, not allocated
- **Attributes country shares of total response, based on normal oil consumption**

IEA Emergency Oil Stock Policy

The emergency oil stocks

- are not for price management

- ineffective over time

- masks important price signals

- discourage investment in new supplies

making the longer-term supply/demand balance tighter

- are for short-term oil supply disruptions

- when market mechanisms break down temporarily

- provide liquidity for markets to recover

*Strategic oil stocks cannot effectively replace market mechanisms,
only mitigate short-term supply disruptions*



Emergency Response: Key Considerations

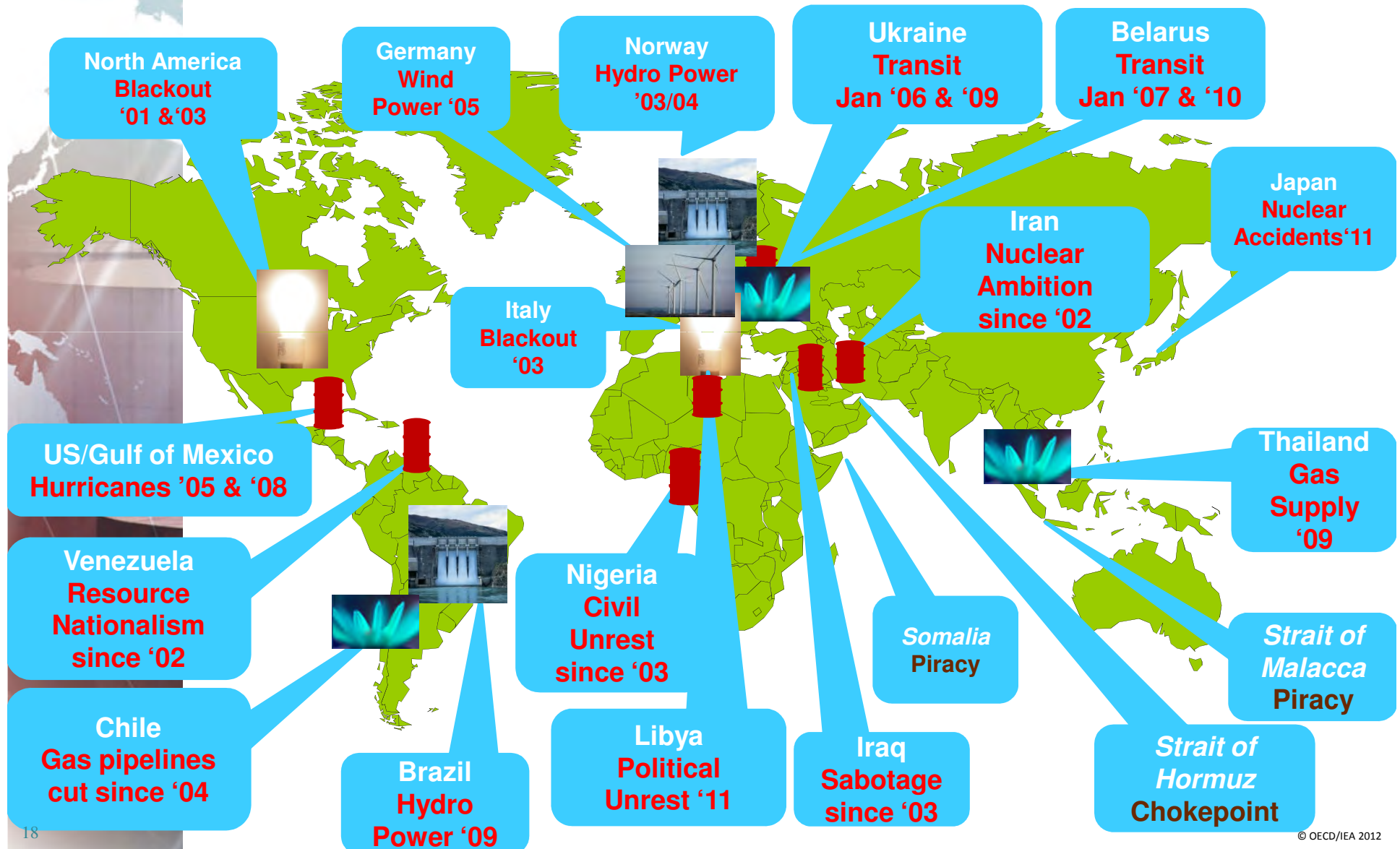
- **A significant supply disruption could generate a severe economic cost**
 - ❑ **The market will always balance supply and demand, given time and freedom of price movement**
 - ❑ **But...will the disruption cause severe economic harm?**
- **What is the market context of the disruption?**
 - ❑ **Can the market cope with the disruption using resources available?**
- **If action is needed, speed & unity of response are key factors**
 - ❑ **Delayed/hesitant response can exacerbate situation**
 - ❑ **A decision will likely need to be made before all necessary information is available**



Key elements of IEA response

- **Continuous assessment of oil market**
 - ❑ Oil Market Report every month (OMR)
 - ❑ Size of disruption; OPEC spare capacity ; stocks in OECD
 - ❑ Necessity of IEA action, impact on market
- **Rapid decision making framework**
 - ❑ Initial Contingency Response Plan – process to coordinate collective decision among 28 countries within 24/48 hours.
- **Flexibility in response measures**
 - ❑ Stocks are key, but other measures possible
 - ❑ Make oil available to the market, not directing – market allocates oil
- **Communication**
 - ❑ Dialogue with Members, key NMCs and OPEC
- **Media strategy to deal with markets**

Energy security remains key and the concept has broadened



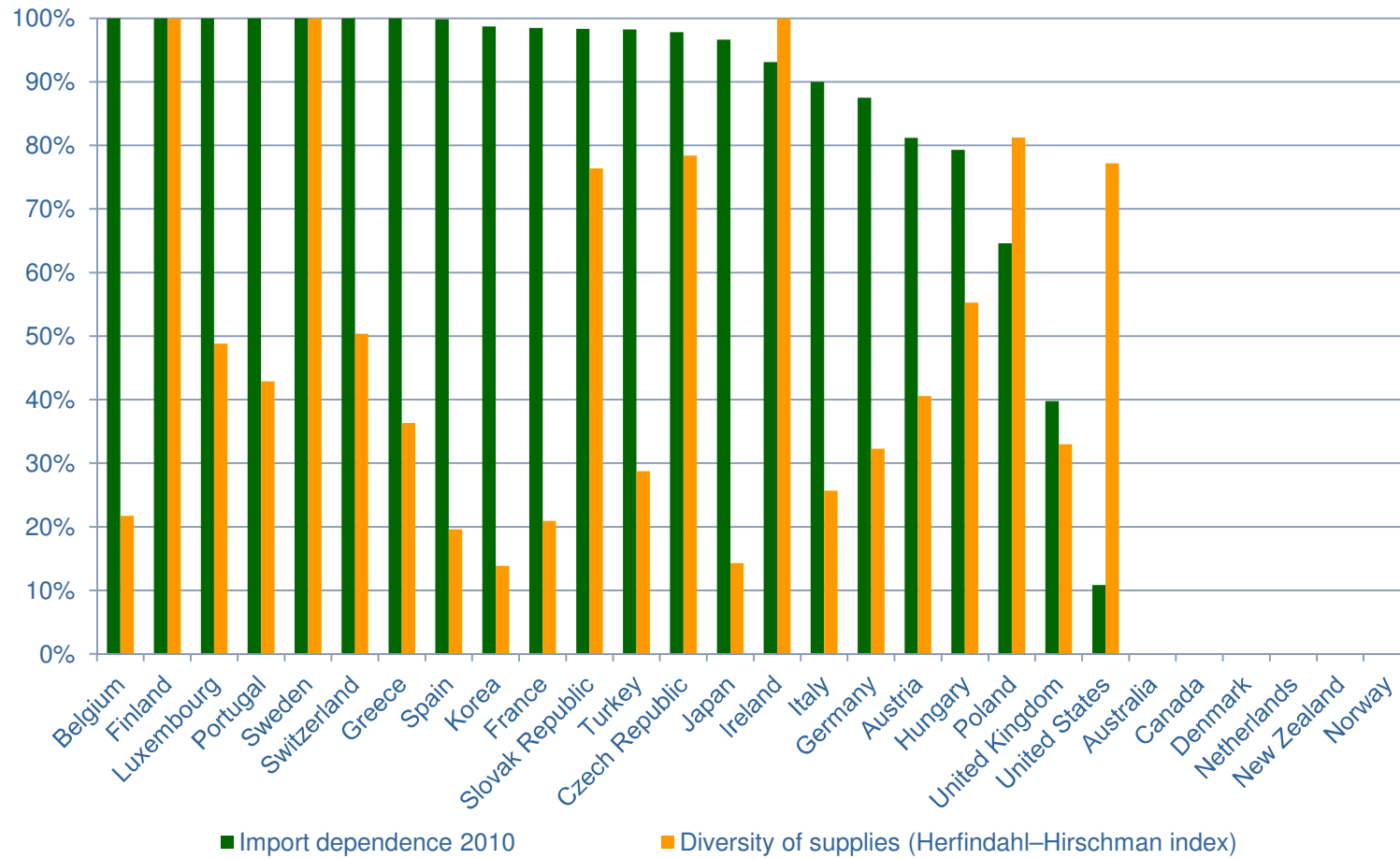


Gas: Available emergency measures

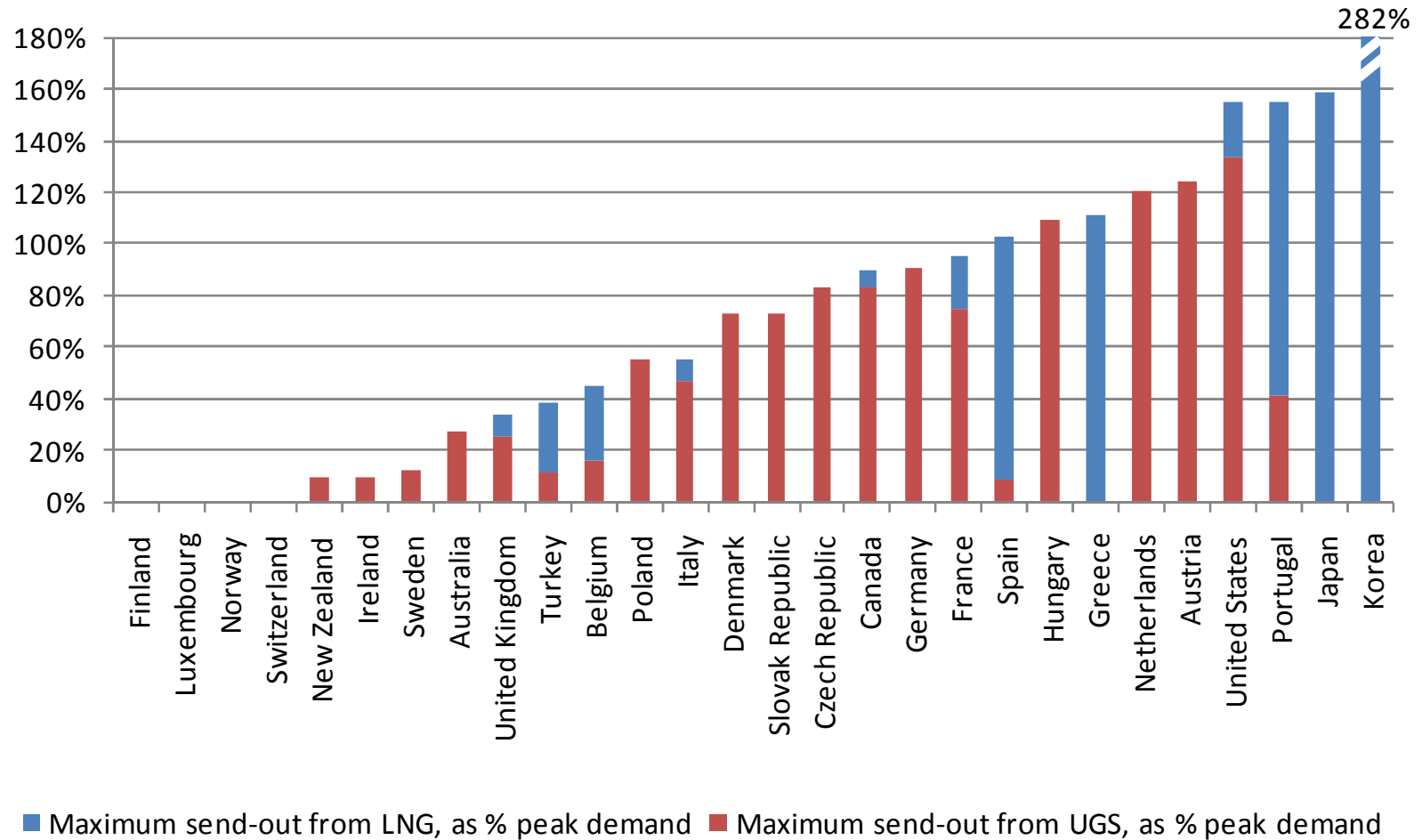
Oil response measures not directly transferrable

- **Use of alternative routes**
 - Diversity of supply routes and sources is key
 - Pipeline (including reverse capacity), LNG (spot cargoes)
- **Stocks (storage)**
 - Industry and/or public stocks
 - Underground and/or LNG storage
- **Spare capacity (Domestic production, gas in pipelines)**
- **Demand-side measures**
 - Interruptible contracts (pre-negotiated in contracts)
 - Public appeal (Government campaigns)
 - Fuel-switching

Gas: import dependency and diversity of supply



Gas: Send-out capacity from storage





Information on IEA Emergency Response

Oil Supply Security 2007

Executive Summary
Table of Contents
Related Press Releases
Download the PDF

Since its founding in 1974, oil supply security respond to short-term oil supply disruptions member countries (and some non-member emergency response mechanisms of IEA member countries).

Below are updated reviews of individual member countries:

2012 Country chapter updates

Hungary

2011 Country chapter updates

Australia
Denmark
Ireland
Korea
Norway
Poland
Portugal
Slovak Republic
Spain

2010 Country chapter updates

Belgium
Canada
Czech Republic
Greece
Italy
New Zealand
Luxembourg
United Kingdom

Closing Oil Stock Levels in Days of Net Imports
(Table explanation here)

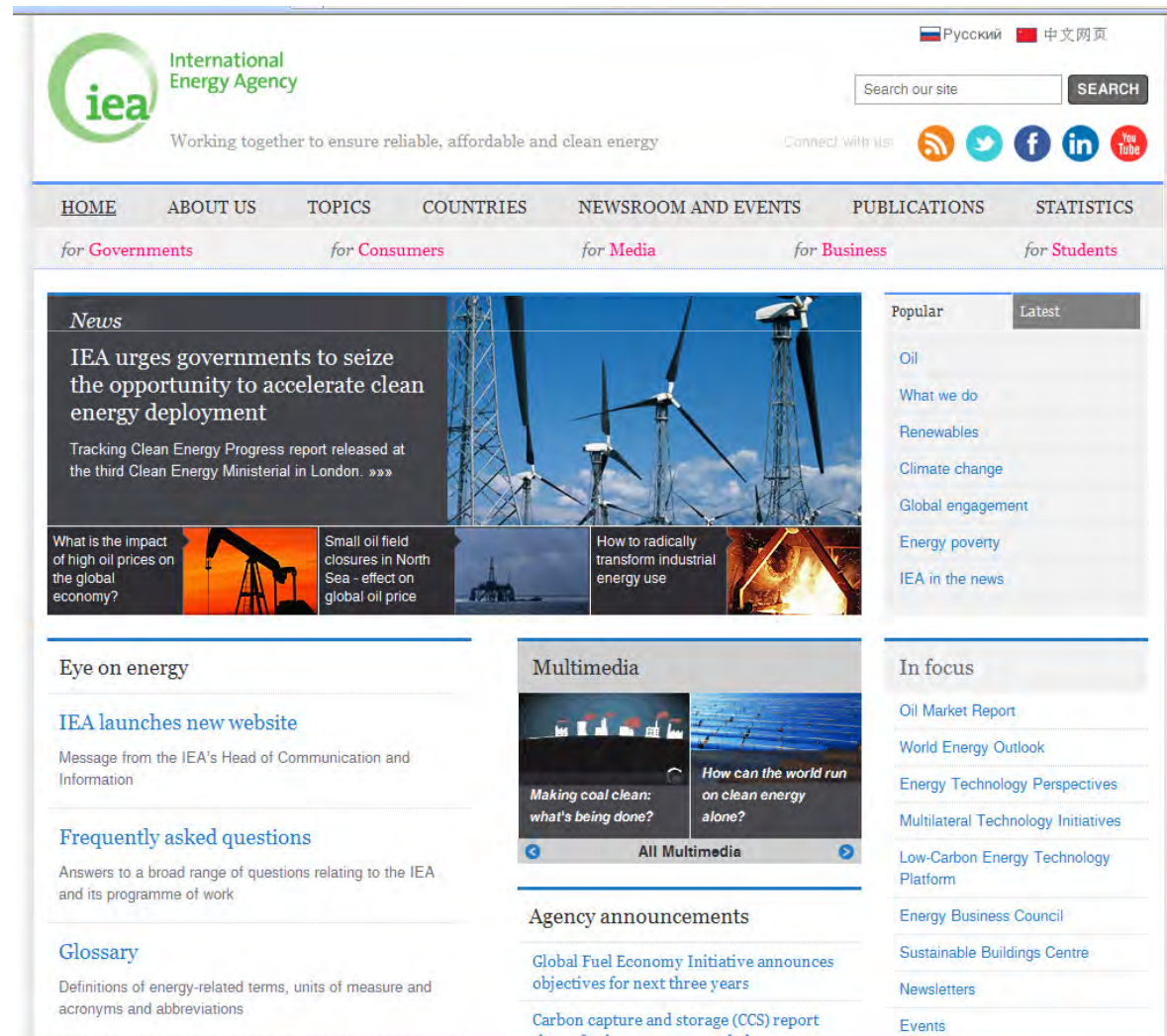
Archives: 2011
Month: December 2011

Countries (click on the countries for more information)	TOTAL (1)	Industry (2)	Public (3)	Of which, held abroad (4)	
				Industry	Public
Canada	net exporter	0	0	0	0
United States	156	87	69	0	0
Total IEA North America	156	87	69	-	-
Australia	86	86	0	0	0
Japan	169	74	95	0	0
Korea	189	88	101	0	0
New Zealand	107	101	7	0	7
Total IEA Asia Pacific	164	78	85	-	-
Austria	99	99	0	11	0
Belgium	122	50	72	9	40
Czech Republic	131	38	93	6	3
Denmark	net exporter	0	0	0	0
Finland	138	80	57	0	0
France	99	35	64	0	2
Germany	136	35	101	3	0
Greece	92	92	0	0	0
Hungary	148	47	101	0	0
Ireland	99	33	67	0	34
Italy	122	122	0	15	0
Luxembourg	96	96	0	86	0
Netherlands	159	84	74	0	51
Norway	net exporter	0	0	0	0
Poland	123	107	16	0	0
Portugal	105	71	34	2	12
Slovak Republic	141	57	84	0	0
Spain	105	64	41	1	0
Sweden	118	118	0	8	0
Switzerland	152	152	0	0	0
Turkey	100	100	0	0	0



Contact details: info@iea.org

Web site: www.iea.org



The screenshot shows the IEA website homepage. At the top left is the IEA logo and the text "International Energy Agency" with the tagline "Working together to ensure reliable, affordable and clean energy". To the right are language options for Russian and Chinese, a search bar, and social media icons for RSS, Twitter, Facebook, LinkedIn, and YouTube. A navigation menu includes "HOME", "ABOUT US", "TOPICS", "COUNTRIES", "NEWSROOM AND EVENTS", "PUBLICATIONS", and "STATISTICS". Below this are links for "for Governments", "for Consumers", "for Media", "for Business", and "for Students". The main content area features a "News" section with a headline: "IEA urges governments to seize the opportunity to accelerate clean energy deployment". Below this are three smaller news items: "What is the impact of high oil prices on the global economy?", "Small oil field closures in North Sea - effect on global oil price", and "How to radically transform industrial energy use". To the right is a "Popular" and "Latest" list of topics including Oil, What we do, Renewables, Climate change, Global engagement, Energy poverty, and IEA in the news. Further down are sections for "Eye on energy" (with a sub-section "IEA launches new website"), "Frequently asked questions", "Glossary", "Multimedia" (with a sub-section "All Multimedia"), "Agency announcements" (with sub-sections for "Global Fuel Economy Initiative" and "Carbon capture and storage (CCS) report"), and "In focus" (with sub-sections for "Oil Market Report", "World Energy Outlook", "Energy Technology Perspectives", "Multilateral Technology Initiatives", "Low-Carbon Energy Technology Platform", "Energy Business Council", "Sustainable Buildings Centre", "Newsletters", and "Events").

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THANK YOU

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