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Overview of IEA Emergency Response Measures

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The Agreement on an International Energy Program (IEP)

Under the I.E.P. Agreement, IEA Member countries' commitments include:

- To maintain emergency oil reserves equivalent to at least 90 days of net oil imports;
- To have ready a programme of demand restraint measures equal to 7% and 10% of national oil consumption;
- To participate in an oil allocation in a severe supply disruption through IEP emergency measures, if necessary.



Emergency Response Measures Available to IEA Member Countries

- Demand restraint;
- Short-term fuel-switching;
- Increased indigenous production;
- Emergency oil reserves and plans for coordinated stockdraw actions;
- And, as a last resort, oil allocation amongst Member countries (Emergency Sharing System).



IEA Demand Restraint Measures

- Most Members have statutory powers to initiate demand restraint measures in both sub-crisis and supply crisis situations
- Oil prices have been deregulated in most IEA economies. It is generally accepted that price increases would assist in the supply demand balance.
- Persuasion and light handed measures are now preferred.
- In a severe disruption economies have the authority (some stand- by) to quickly invoke more compulsory measures which include reduced speed limits, driving bans on certain days, restrictions on heating, lighting and air conditioning.
- While many members have rationing systems. These programmes have long lead times of 2-3 months or more.



Other Emergency Response Measures

- IEA surge production capacity is rather small and concentrated in major oil producing countries (e.g. Australia, Canada, Norway, UK).
- IEA capacity to switch away from oil is also modest and limited mainly to power generation. Oil-fired electricity generation has been reduced from 25% of total electricity generated in mid-1970s to 7% now.
- In several IEA countries (e.g. Japan, Italy), the contribution of oil to electricity generation remains significant.



THE EMERGENCY SHARING SYSTEM DEVELOPED IN 1974

MARKET DEVELOPMENTS SINCE 1974

- Market transparency
- Spot rather than term deals
- Impact of the Futures Market
- Increased Government controlled emergency stocks
- Reduction in volume of equity oil available to companies

TIMES HAVE CHANGED

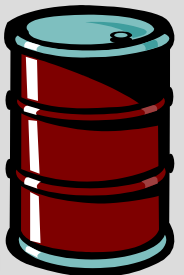
- Market is far better placed to handle reallocation of supply
- Sharing system is unlikely to work as envisaged if activated
- System should be kept intact and in reserve, to be activated as an absolute last resort, if the markets fail to respond in the way we confidently predict



Co-ordinated stockdraw is our most effective response measure

- Produces real barrels
- Impact on the market is immediate
- Provides a market calming effect
- Impacts world balance

Conclusion: Countries need to hold strategic stocks...





What is the IEA Stockholding Obligation?

- Net importing IEA Member countries must maintain oil reserves equivalent to **at least 90 days of net imports** (based on previous calendar year)
- **The calculation excludes:** marine bunkers and naphtha and makes a 10% deduction for unavailable stocks
- **Main types of stocks excluded are:** oil not yet produced, stocks held in pipelines and tankers at sea, stocks held in service stations, retail stores and by consumers, and military stocks

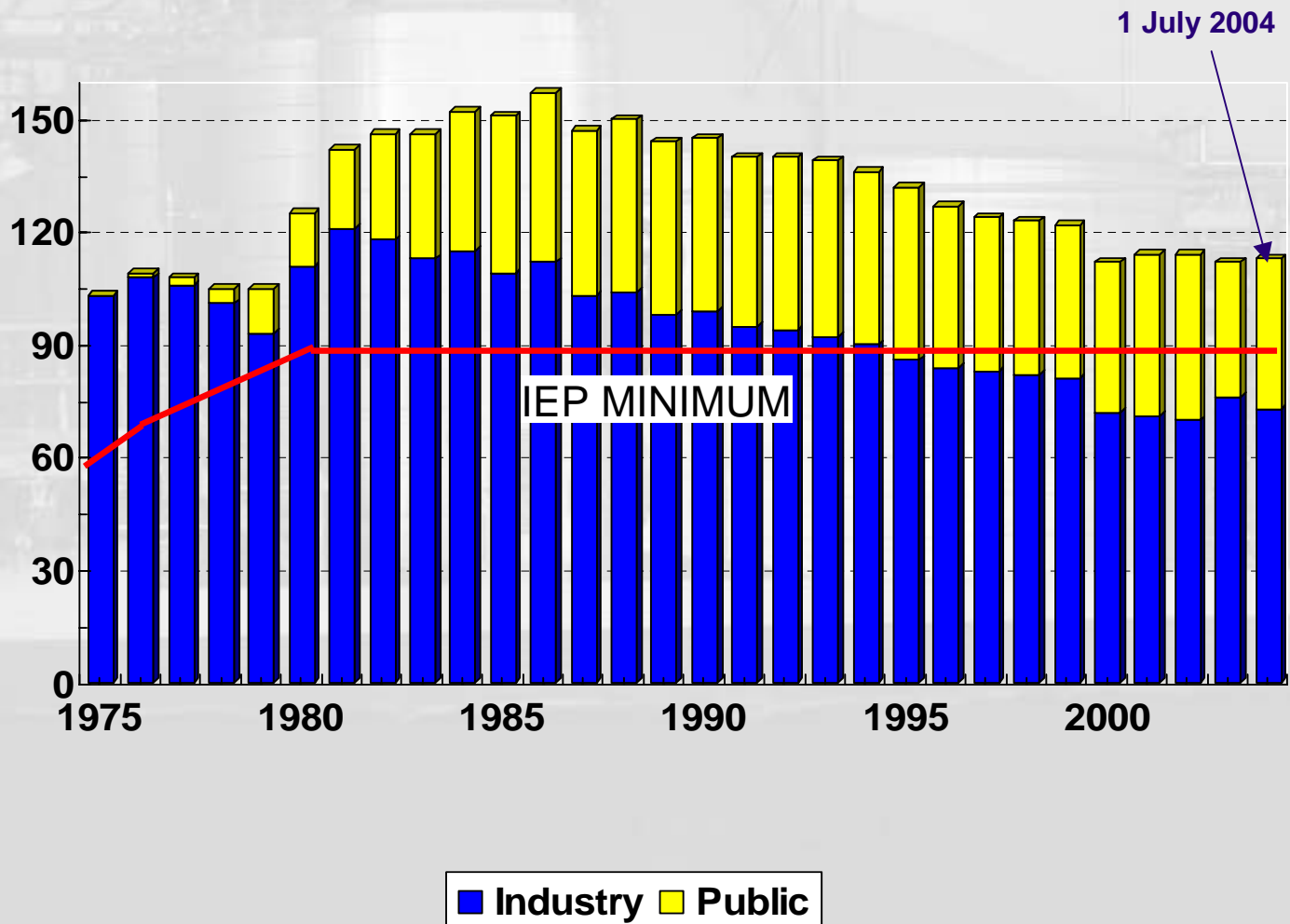


How Is The Stock Obligation Monitored?

- **Monthly oil data** submitted to the IEA Secretariat with two month time lag
- Emergency Planning and Preparations and the Statistics divisions are responsible for the **monitoring of stocks**
- **Quarterly reports** are submitted for consideration of the Standing Group on Emergency Questions and the IEA Governing Board



Stocks Of IEA Net Importers: Days Of Net Imports





Types of Oil Stockholding Systems

- **Company stocks**
Compulsory stocks and commercial stocks
- **Government stocks**
Financed with central government budget
Held exclusively for emergency purposes
- **Agency stocks**
Maintained for emergency purposes
Held by public or private bodies
- We refer to Government and Agency stocks together as **PUBLIC STOCKS**



Stockholding Systems by IEA Member Country

- **Only Company Stocks:**
Australia, Austria, Belgium, Greece, Italy, Luxembourg, New Zealand, Portugal, Sweden, Switzerland and Turkey (Net exporters: Canada, Norway and the UK)
- **Company and Government Stocks:**
Japan, Korea, Czech Republic and the United States
- **Company and Agency Stocks:**
Finland, France, Hungary, Germany, Ireland, the Netherlands and Spain (Net exporter: Denmark)

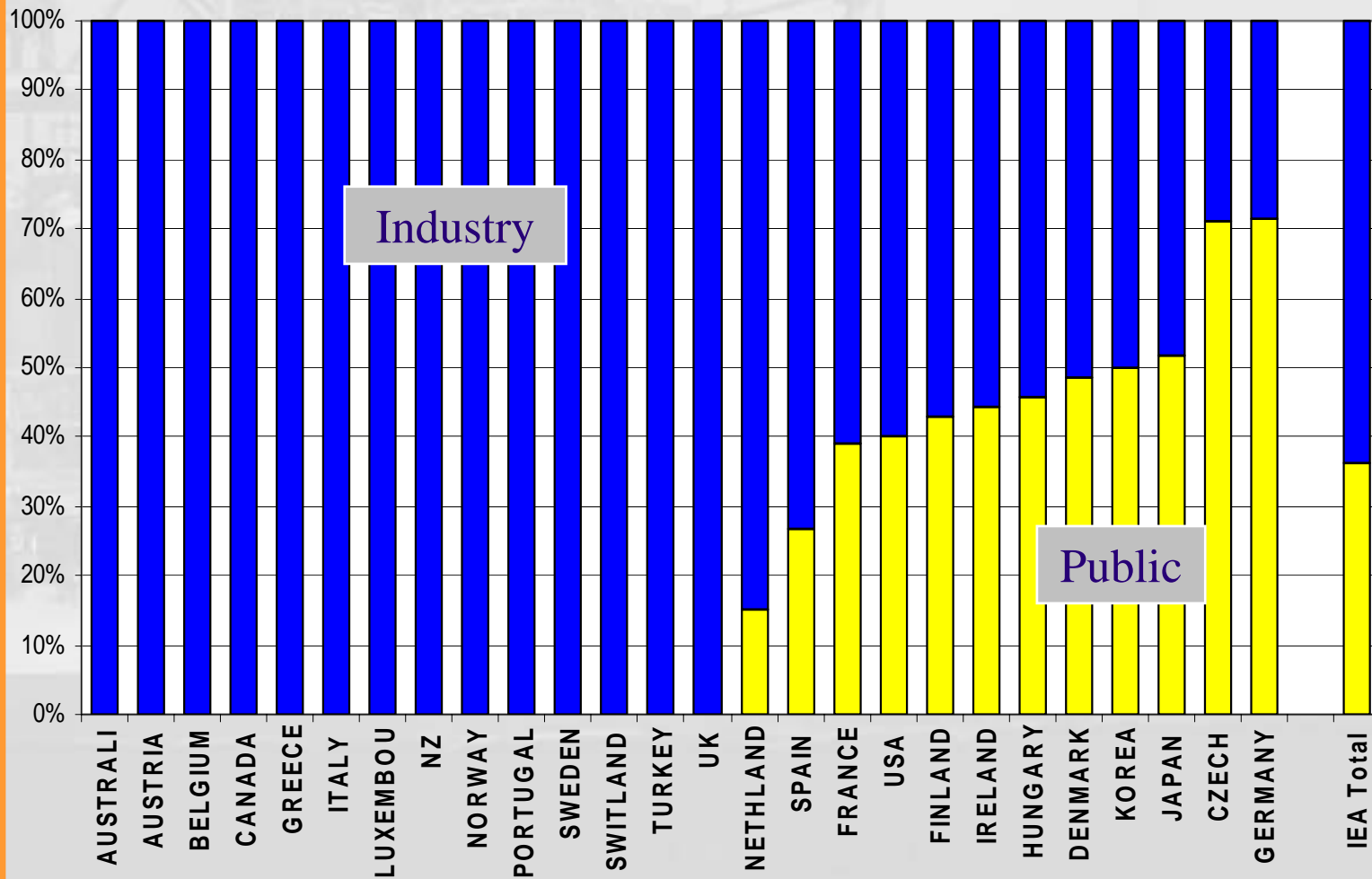


Compulsory Industry Stocks

- Industry stocks are counted towards the IEA stockholding obligation
- Many IEA Member countries impose compulsory stockholding requirements on companies
- Compulsory stocks are normally commingled with operation stocks, thus, quickly available to markets
- However, there are issues of transparency when compulsory stocks are held by industry



Industry v Public Stocks (1st June 2004)





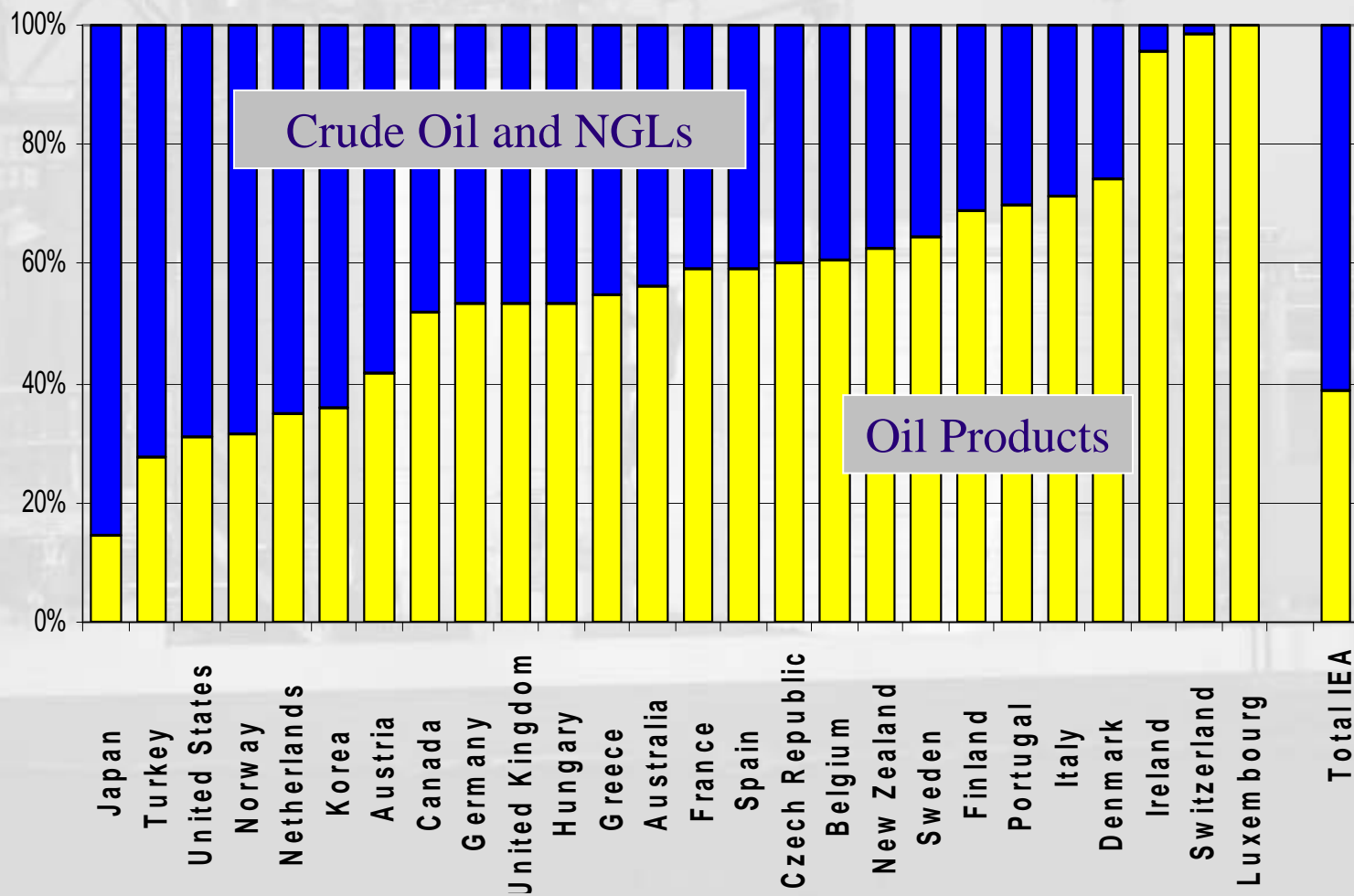
PUBLIC STOCKS – A Shift to Agencies

- **Priority : government/agency stocks or company stocks?**
 - Circumstances of a disruption
 - National policy
- **Declining share of company stocks, increasing share of agency stocks**
- **Also, a reduction in government stocks, with a shift of responsibility to agencies**



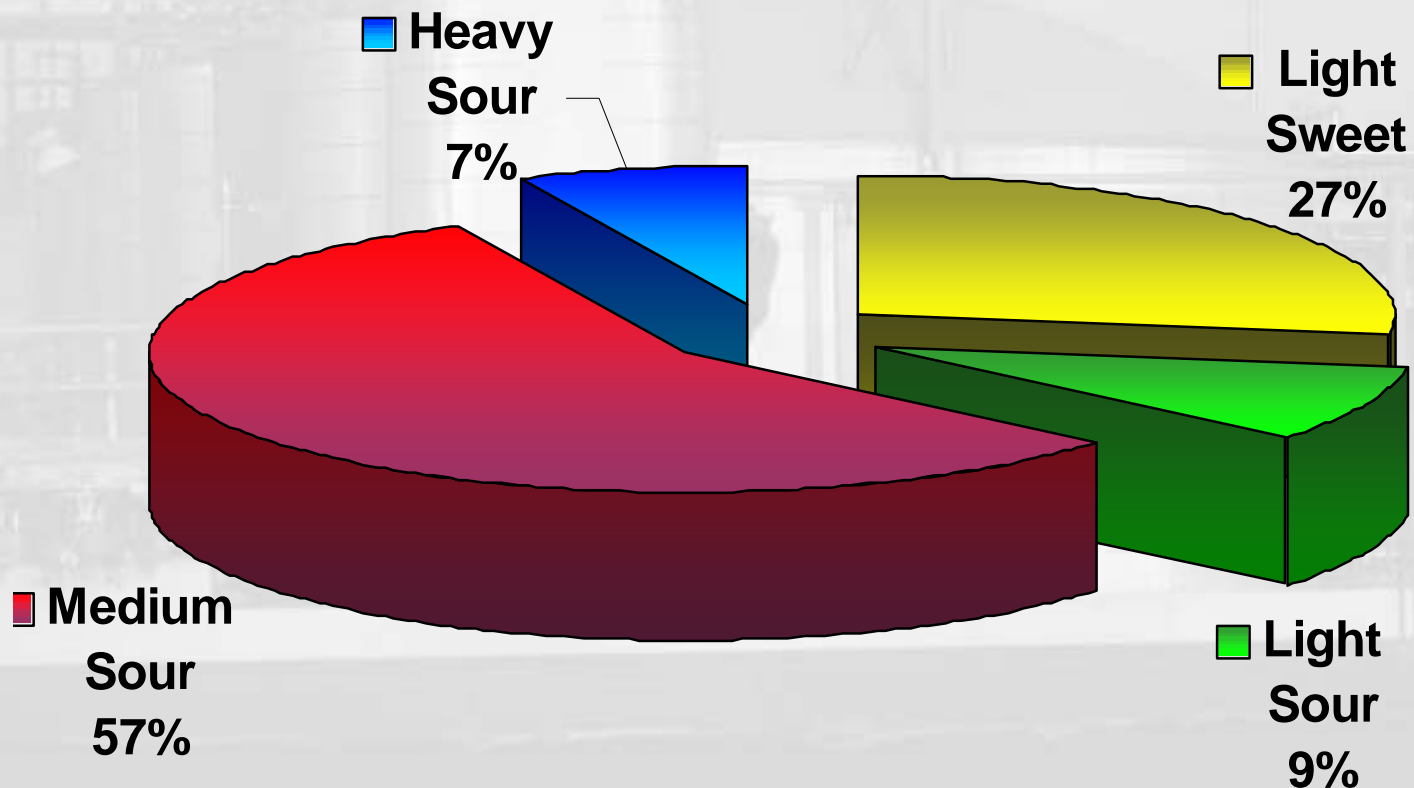
Composition of Stocks

1st June 2004



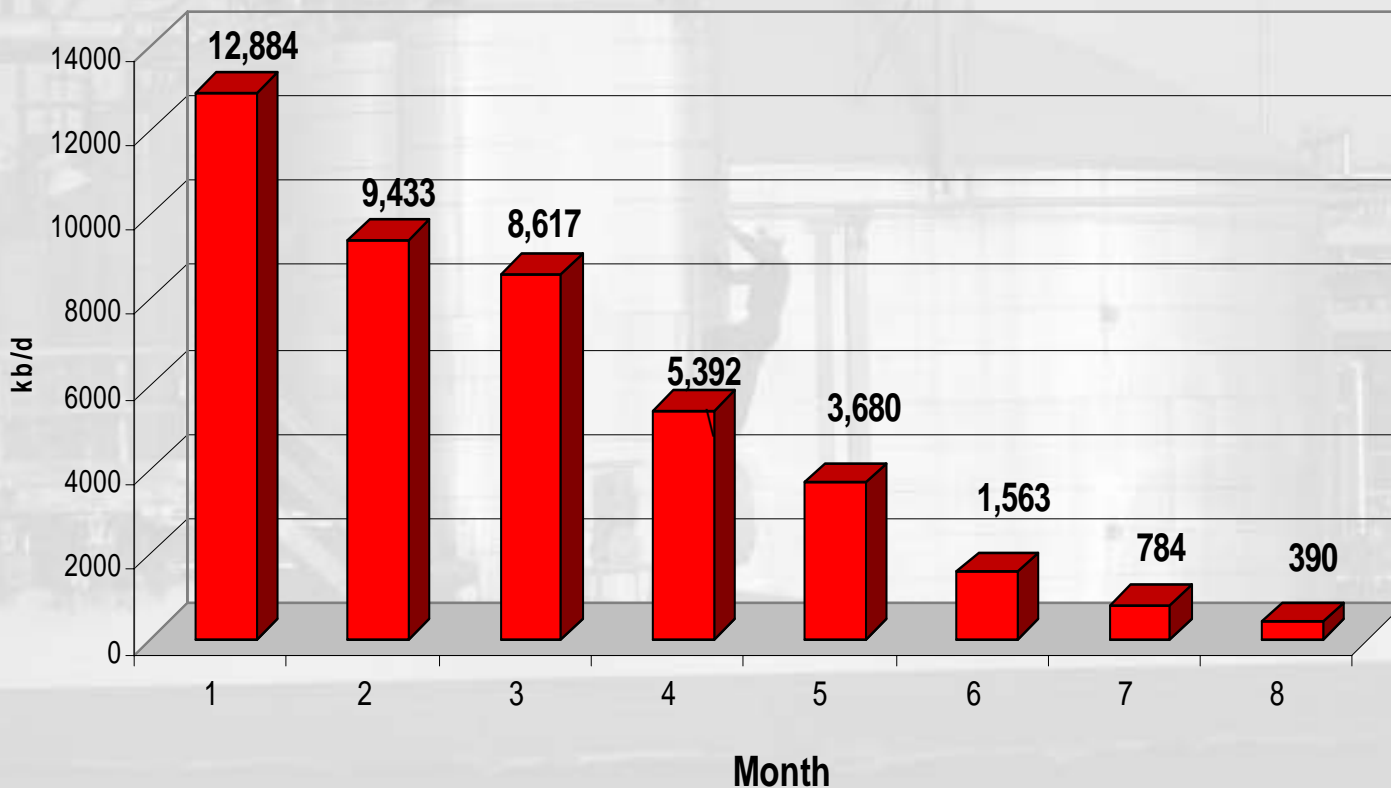


Public Stocks Crude Oil Quality





Maximum Drawdown Profile for IEA Public Stocks, 2002



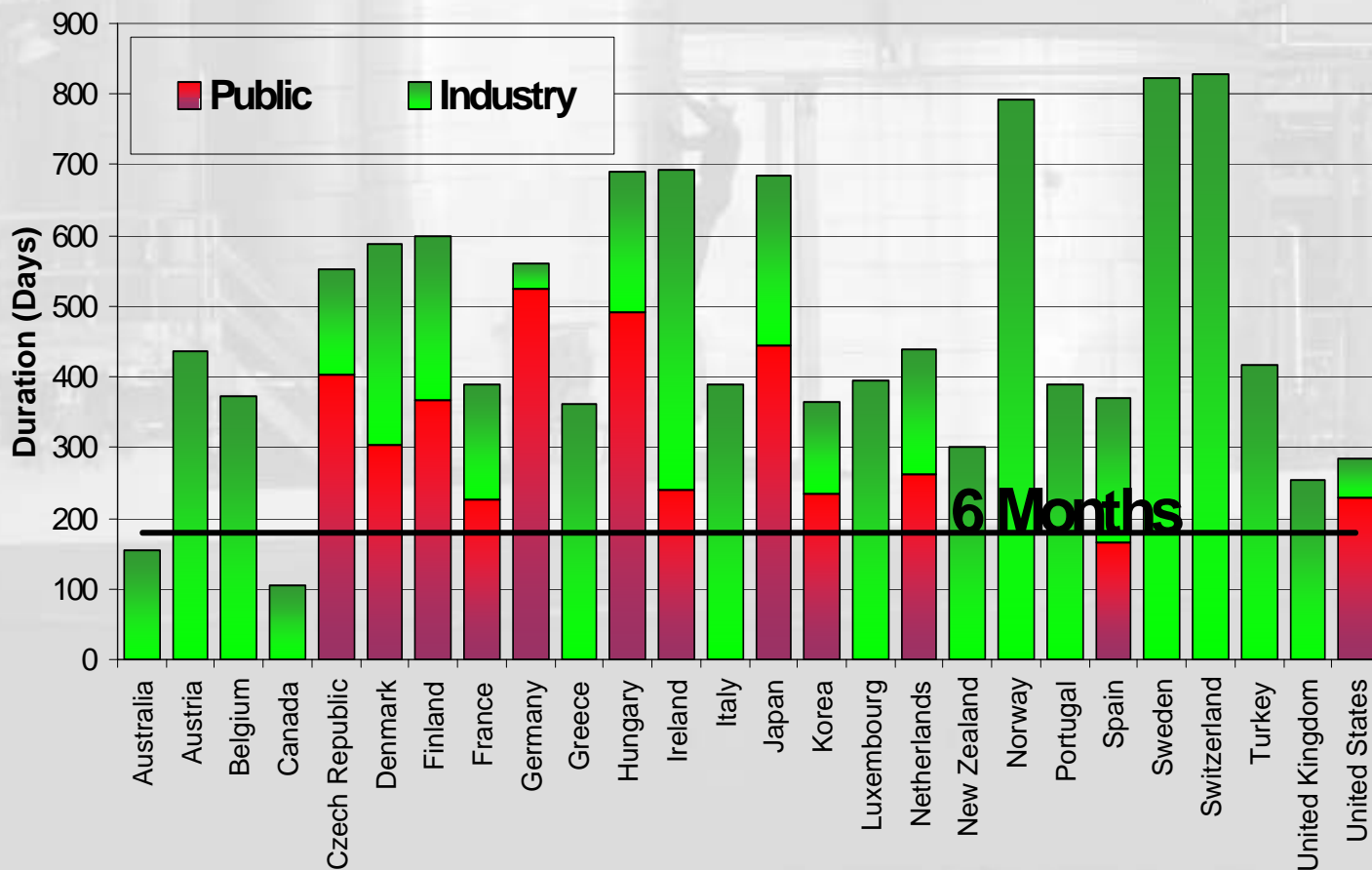
Lead Time: 1-32 days



Strategic Stocks Provide Good Protection for Disruptions

Hypothetical Example of Stockdraw Sustainability to 5.6 mb/d Response

(Based on historical data: Iranian revolution, Oil shortage 5.6 mb/d, 6 months)





Conclusions on IEA Measures

- High flexibility in national arrangement of emergency measures to meet IEP obligations
- Diversity of stockholding arrangements with a trend towards stockholding agencies
- Strong statutory power over company stocks
- Statutory power to initiate demand restraint measures
- Surge production and fuel switching: supplementary measures maintained in some Members
- Experience has shown that stockdraw is the most rapid and effective emergency response