### Joint Rosstat-IEA Monthly Oil and Gas Statistics Workshop

Rosstat, Moscow, 17 February 2012

Why a need for monthly oil and gas statistics?

Why the Joint Organisations Data Initiative (JODI)?





International Energy Agency







Breakdown of the final consumption by sectors and sub-sectors



### **Energy Balance**

-										
3		T	housand t	onnes of oil	equivalent /	Milliers de	tonnes d'é	quivalent pe	étrole	
	SUP LY ND CONSULPTION	Coal		Petroleum Products	Gas	Nuclear	Hydro	Geotherm. Solar etc.	Combust. Renew. & Waste	Electricity
	API ROVISIONNEMENT ET DEMANDE	Charbon	Pétrole brut	Produits pétroliers	Gaz	Nucléaire	Hydro	Géotherm. solaire	Comb. ren. & déchets	Electricité
7	Pr duction	1145355	181427	-	42621	13835	34143	-	223561	-
/	Imports	14893	126817	41493		-	-	-	-	431
1	xports	-55279	-8067	-16722	-2484	-	-	-	-	-963
1	ntl. Marine Bunkers	-	-	-7642	-	-	-	-	-	-
/	Stock Changes	-17345	788	288			-			-
7	TPES	1087624	300965	17417	40137	13835	34143	-	223561	-532
	Transfers	-	-74	88			-			-
	Statistical Differences	7118	-1328	917	-1137	-	-	-	-	-
	Electricity Plants	-527596	-213	-15059	-2637	-13835	-34143	-	-861	214780
	CHP Plants					-	-	-		-
	Heat Plants	-71089	-3	-2672	-1938	-	-	-	-503	-
	Gas Works Petroleum Refineries	-6640	-290405	-144 283439	4841	-	-	-	-	-
	Coal Transformation	-69485	-290405	203439						- :
	Liquefaction Plants	-		_			_	_	_	_
	Other Transformation	-					-			-
	Own Use	-46624	-5037	-17434	-6549	-	-	-	-	-28398
	Distribution Losses	-	-	-20	-864	-	-	-	-	-14494
	TFC	373308	3905	266532	31852	-	-	-	222197	171355
	INDUSTRY SECTOR	279763	2509	35753	12366	_	_	-	-	116217
	Iron and Steel	102809		3011	894		-			21882
	Chemical and Petrochemical	28095	-	5380	5589	-	-	-	-	21588
	Non-Ferrous Metals	8147	-	1559	791	-	-	-	-	12639
	Non-Metallic Minerals	85282	-	8904	2540	-	-	-	-	12179
	Transport Equipment	3226	-	1067	459	-	-	-	-	2580
	Machinery Mining and Quarring	9117 3628	-	3834 1225	1360 151	-	-	-	-	13801 4337
	Mining and Quarrying	11818		1577	218					433
J	Food Tobacco  Paper ulp and Printing	8551	-	761	65		_			4
1	Wood and Wood Products	1870		268	14		-			1
	Construction	3200	-	4161	125	-	-	-	-	2
	Textile and Leather	9378	-	1572	64	-	-	-	-	8
	Non-specified	4642	2509	2434	98	-	-	-	-	7
	TRANSPORT SECTOR	4080	-	108334	79	-	=	-	-	1
	International Aviation	-	-	2095	-	-	-	-	-	
	Domestic Aviation	-	-	7566	-	-	-	-	-	
ì	Road Raii	4079	-	75670	70	-	-	-	-	
	Pipeline Asport	4079	-	9129 4627	9	-	-		-	1
	Domestic Navigation	1		9247	-	-				
J	Non-specified	i		-			-			
١	THER SECTORS	67380	238	61076	12071				222197	53
	Resential	46162	230	17598	8895		-		222197	24
	Comm. and Publ. Services	5190		22302	3177		_	_	-	10
	Agriculture/Forestry	12155	-	21175	-	-	-	-	-	7
	Fishing	-	-	-	-	-	-	-	-	
	Non-specified	3872	238	-	-	-	-	-	-	11
	NON-ENERGY USE	22085	1158	61369	7336	-	-	-	-	
	in Industry/Transf./Energy	22085	1158	61369	7336	-	-	-	-	
	of which: Feedstocks	-	1158	33590	7336	-	-	-	-	
	in Transport	-	-	-	-	-	-	-	-	
	in Other Sectors	-	-	-	-	-	-	-	-	-
	Electr. Generated - GWh	1972267		60634	11931	53088	397017		2504	
	Electricity Plants	1972267		60634	11931	53088	397017		2504	
	CHP Plants		-	-		-	-	-		
-1	Heat Congreted T.I	2004054		04445	00202				40645	

90203

**Annual** questionnaires allow countries to build useful energy balances

Total

Total

1640944 183634 -83514 -7642

> 5570 -379565 -21545 -1943 -6966 -69485

-114690 -16009 1112532

475761

132263

73550 24947 109054

-10647

29153

12899

12645

12645

Possibility to build some indicators: self sufficiency, energy intensity, some efficiency ratios, etc.

But is it enough?

2497441



### Oil analysts and policy makers need more frequent data



### Policy Makers

□ IEA Member countries have an obligation to hold 90 days of stocks (net imports/consumption)



Need reliable and timely data on imports, consumption and stocks









Oil is the most traded commodity in the world. Analysts need monthly, weekly, daily data to assess the evolution of the market.



Importance of having timely data for monitoring a crisis





Monthly data on supply is essential

No real needs of transformation except for oil refineries and possibly power plants

No real needs
to have a
detailed a
breakdown of
the final
consumption
by sector and
subsector



Differe

#### nthly and annual needs

	/ Milliers de tonnes d'équivalent pétrole												
				-	, willione de l								
SUPPLY AND CONSUMPTION	OUAI	Oil	Products	Gaš	Nuclear	Hydro G	Seotherm. Solar etc.	Combust. Renew. & Waste	Electricity	Heat	Total		
APPROVISIONNEMENT ET DEMANDE	Charbon	Pétrole brut	Produits pétroliers	Gaz	Nucléaire	Hydro G	Géotherm. solaire	Comb. ren. & déchets	Electricité	Chaleur	Total		
Production	1145355	181427	-	2621	13835	34143	-	223561	-	-	1640944		
Imports	14893	126817	41493		-	-	-	-	431	-	183634		
Exports	-55279	-8067	-16722	2484	-	-	-	-	-963	-	-83514		
Intl. Marine Bunkers	-	-	-7642	-	-	-	-	-	-	-	-7642		
Stock Changes TPES	-17345	788	288	0137	13835	34143		223561	-532		-16269 1717153		
	1087624	300965	17417	40137	13835	34143	-	223561	-532	-			
Transfers		-74	88		-	-	-	-	-	-	13		
Statistical Differences Electricity Plants	7118 -527596	-1328	917 -15059	1137	-13835	-34143	-	- 001	214780	-	5570 -379565		
CHP Plants	-527596	-213	-15059	-2637	-13835	-34143		-861	214780		-379565		
Heat Plants	-71089	-3	-2672	1938				-503		54660	-21545		
Gas Works	-6640	-5	-144	4841	-			-303	_	34000	-1943		
Petroleum Refineries	-	-290405	283439		-	_		_	_	_	-6966		
Coal Transformation	-69485	-	-	-	-	-	-	-	-		-69485		
Liquefaction Plants	-	-	-	-	-	-	-	-	-	-	-		
Other Transformation	-	-	-	-	-	-	-	-	-	-	-		
Own Use	-46624	-5037	-17434	6549	-	-	-	-	-28398	-10647	-114690		
Distribution Losses	-	-	-20	-864	-	-	-	-	-14494	-630	-16009		
TFC	373308	3905	266532	1852	-	-	-	222197	171355	43383	1112532		
INDUSTRY SECTOR	279763	2509	35753	2366	-	-	-	-	116217	29153	475761		
Iron and Steel	102809	-	3011	894	-	-	-	-	21882	3667	132263		
Chemical and Petrochemical	28095	-	5380	5589	-	-	-	-	21588	12899	73550		
Non-Ferrous Metals	8147	-	1559	791	-	-	-	-	12639	1811	24947		
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Transport Equipment	3226		1067	459	-	-	-	-	2580	625	7956		
Machinery	9117 3628	1	3834 1225	1360 151	-	-	-	-	13801 4337	978 303	29091 9644		
Mining and Quarrying Food and Tobacco	11818	1	1577	218	-	-	-	-	4123	1977	19714		
Paper Pulp and Printing	8551		761	65					4019	2373	15768		
Wood and Wood Products	1870		268	14	-			_	1114	127	3392		
Construction	3200		4161	125	-	-	-	-	2012	111	9608		
Textile and Leather	9378		1572	64	-		-	-	8288	3685	22987		
Non-specified	4642	2509	2434	98	-	-	-	-	7656	448	17788		
TRANSPORT SECTOR	4080		108334	79	_	_	_	_	1737	_	114230		
International Aviation			2095		-		-	-	-	-	2095		
Domestic Aviation	-	-	7566	-	-	-	-	-	-	-	7566		
Road	-	-	75670	70	-	-	-	-	-	-	75740		
Rail	4079	-	9129	-	-	-	-	-	1737	-	14944		
Pipeline Transport	-	-	4627	9	-	-	-	-	-	-	4636		
Domestic Navigation	1	-	9247	-	-	-	-	-	-	-	9248		
Non-specified	1	-	-	-	-	-	-	-	-	-	1		
OTHER SECTORS	67380	238	61076	2071	-	-	-	222197	53401	14230	430593		
Residential	46162	-	17598	8895	-	-	-	222197	24293	12356	331502		
Comm. and Publ. Services	5190	-	22302	3177	-	-	-	-	10040	867	41576		
Agriculture/Forestry	12155	-	21175	-	-	-	-	-	7536	18	40885		
Fishing			-	-	-	-	-	-					
Non-specified	3872	238	-	-	-	-	-	-	11532	988	16630		
NON-ENERGY USE	22085	1158	61369	7336	-	-	-	-	-	-	91948		
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of which: Feedstocks	-	1158	33590	7336	-	-	-	-	-	-	42084		
in Transport	-	-	-	-	-	-	-	-	-	-	-		
in Other Sectors	-	-	-	-	-	-	-	-	-	-	-		
Electr. Generated - GWh	1972267		60634	1931	53088	397017		2504			2497441		
Electricity Plants	1972267		60634	1931	53088	397017	-	2504 2504	-	-	2497441		
CHP Plants	1912201		00034	1931	55066	39/01/	-	2004	-	-	2431441		
	2091954		0/1/45	90203	-	-	-	12645	-	-	2288947		
Heat Generated - TJ CHP Plants	2091904		94145	0203	-	-	-	12645	-	-	2200947		
Heat Plants	2091954		0/1/15	90203	-	-	-	12645	-	-	- 2288947		
rieat Piatits	2091904		94145	30203	-	-	-	12645	-	-	2200947		



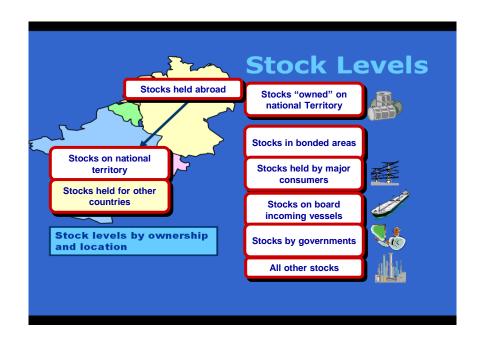
### For the IEA: Emphasis is on oil stocks data



### Monthly Oil Questionnaire (MOS for M-2)

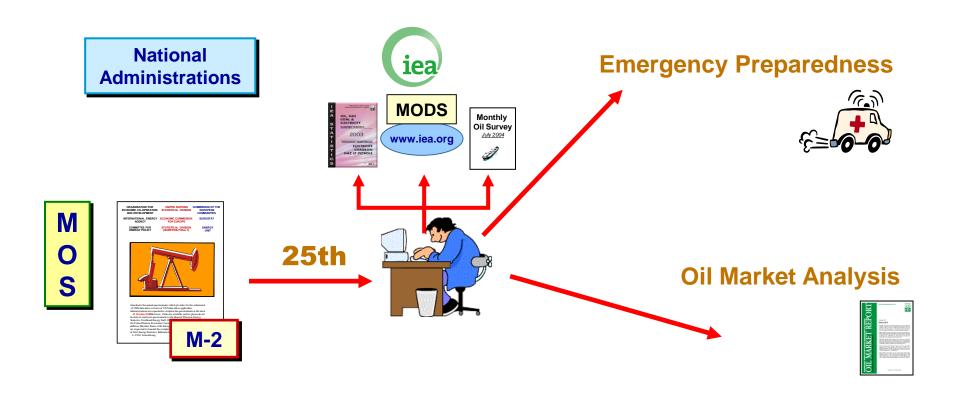


- **■** Production
- Imports/Exports
  by Origin and
  destination
- **■** Refinery data
- Deliveries
- **Stock levels**





# The monthly MOS meets the needs of the IEA but is it the universal solution?



Oil analysts, oil companies, traders, banks need more timely data (M-2 is often outdated), and broader coverage

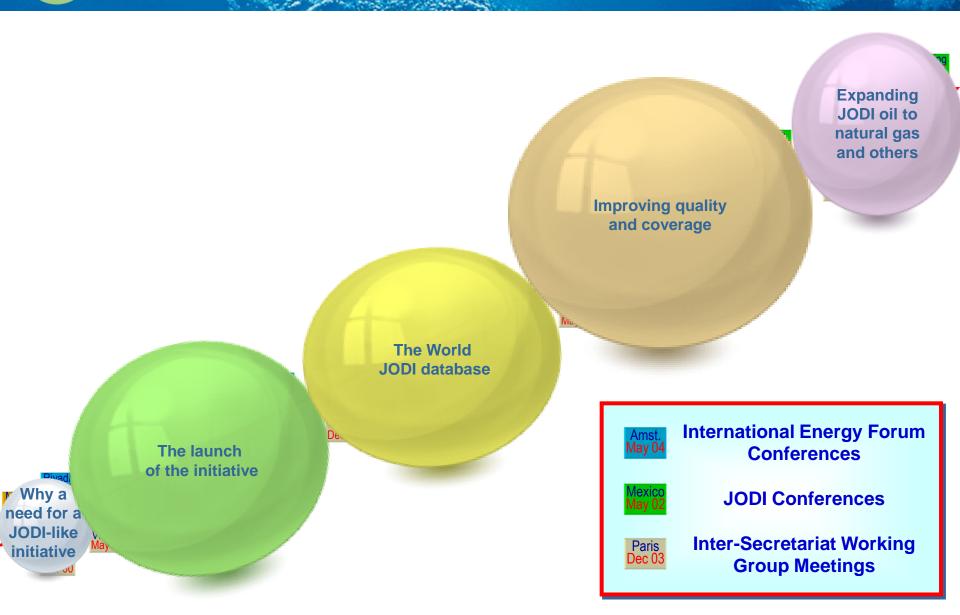


## International A need to more timely and better coverage data: The JODI Initiative





# 10 Years of Commitment and Hard Work



Why a International need for a JODI-like

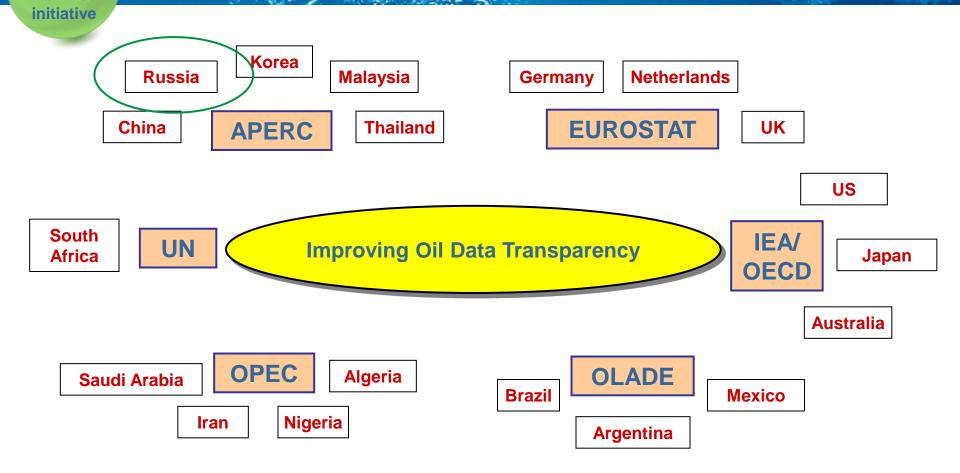
assessment and transparency."

# The conjunction of both political and technical concerns paved the way to the JODI initiative

### initiative **Technical Heads of Statistics** in Paris There are many problems with definitions, units, methodology Organisation can solve some of the **Paris** problems **Political** 13-14 Nov. 2000 Involvement of countries is essential **Bangkok** Ministers at the 7th IEF Meeting 2-3 April 2001 Riyadh 17-19 Nov. 2000 "Co-operation among relevant international organisations, as well as the participating countries, in improving and timely accessing to energy data is important for market

The ternational arrgy Agency launch of the

## The 1st JODI Conference: Bangkok, 2-3 April 2001



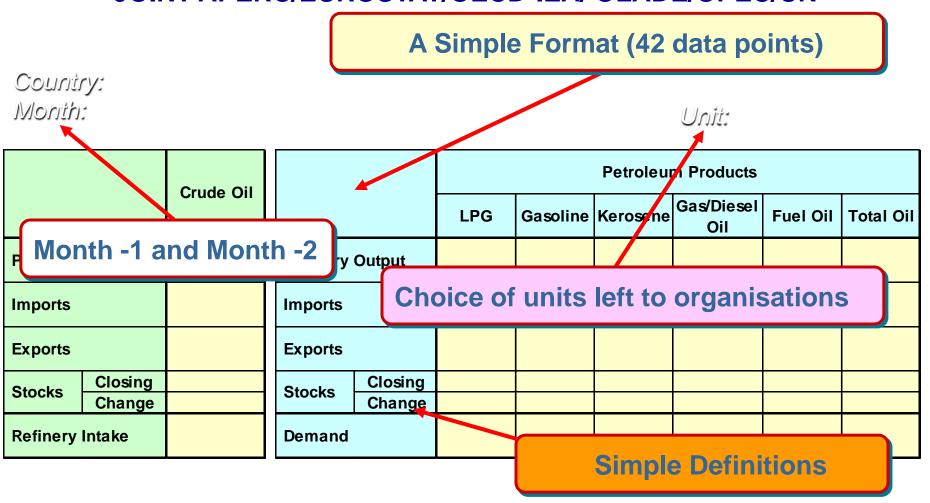
Agreement to launch a six-month joint oil data exercise.

JODE which later became JODI was born.

The ternational argy Agency launch of the initiative

### Countries and Organisations decided to keep the Exercise as simple as possible

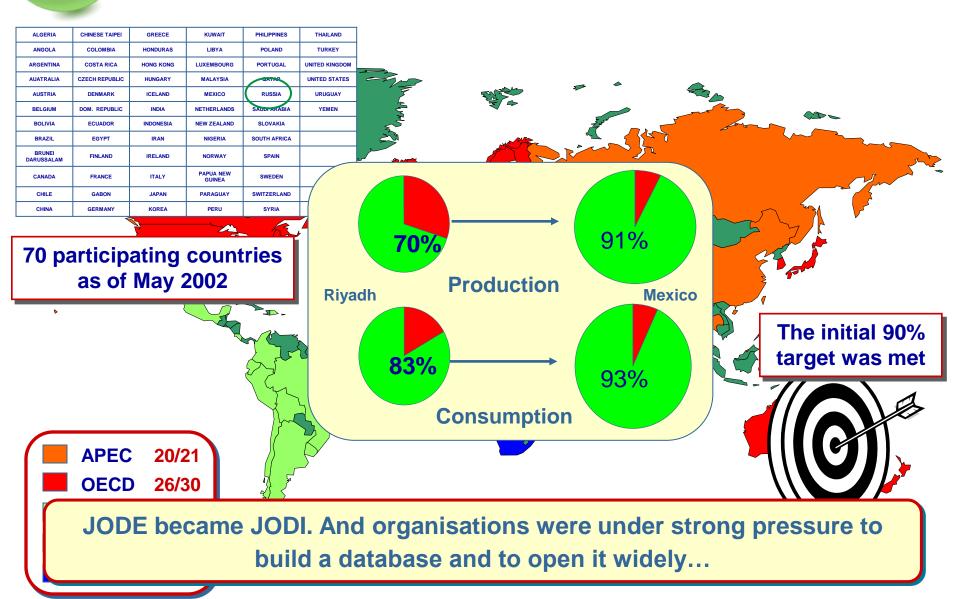
#### JOINT APERC/EUROSTAT/OECD-IEA/ OLADE/OPEC/UN



The launch of the initiative

ternational ergy Agency

# The interest in participating in JODE grew very quickly. Within one year participation went from a few percents to over 90%.



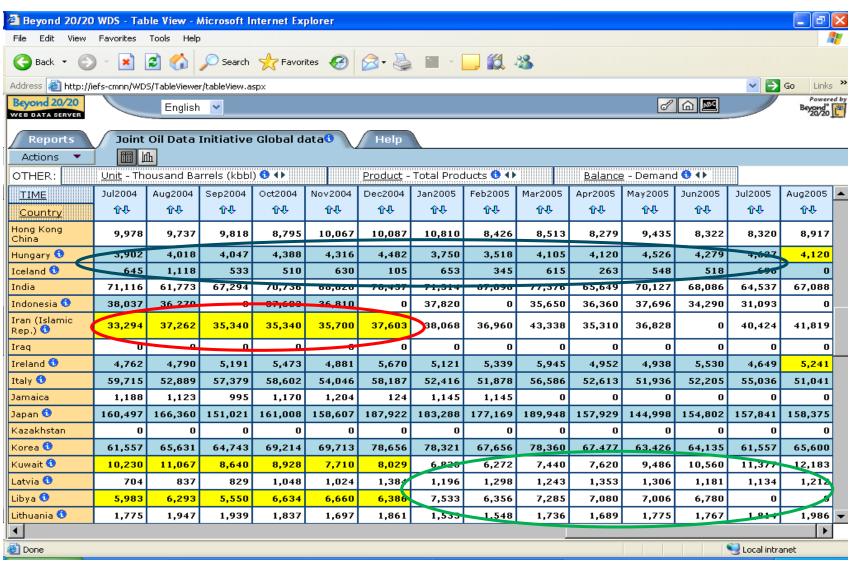




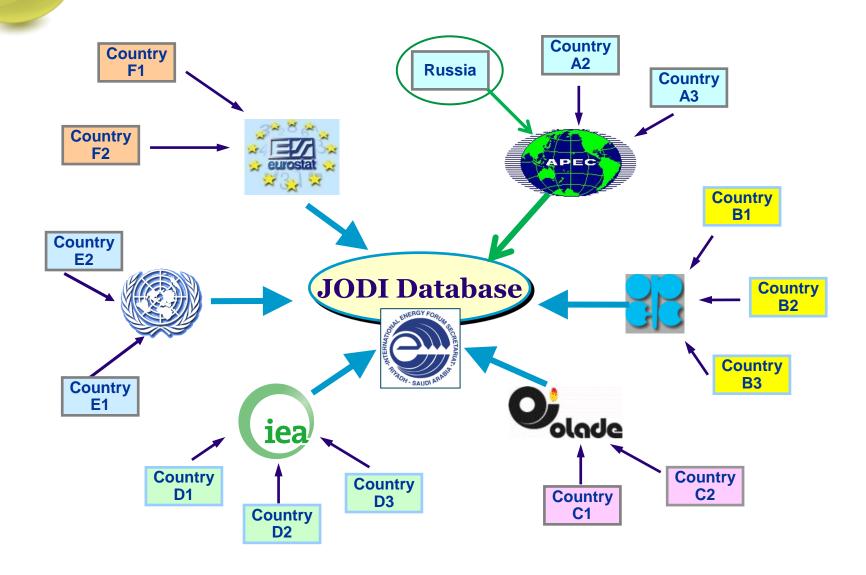
The decision was taken to release the database: On 19 November 2005, King Abdullah launched the JODI Database in front of 70 Ministers

### The JODI database

Not only data points but also some indication on data quality



# 2005: A pivotal year with the arrival of the IEF Secretariat as a coordinator for the initiative



**Improving** quality and coverage

national Agency

### Performance assessment and educative tools

#### **Assessment of Participation in JODI**













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rway	 8
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Algeria	0	0	8	Germany	9	9	8	Norway	8	9	
Angola	0	0	0	Greece	9	0	8	Oman	0	0	
Argentina	0	8	9	Grenada	n.a.	n.a.	n.a.	Panama	8	8	
Australia	0	8	0	Guatemala	8	8	8	Papua New Guinea	8	8	
Austria	0	9	0	Guyana	n.a.	n.a.	n.a.	Paraguay	0	(2)	
Azerbaijan	0	0	0	Haiti	n.a.	n.a.	n.a.	Peru	8	8	
Bahrain	0	0	9	Honduras	8	8	8	Philippines	9	9	
Barbados	8	8	8	Hong Kong, China	9	8	8	Poland	8	8	
Belgium	0	0	0	Hungary	9	0	0	Portugal	0	•	
Bolivia	0	8	0	loeland	9	9	8	Qatar	8	9	
Brazil	0	8	0	India	0	0	⊜	Romania	8	9	
Brunei Darussalam	0	⊜	0	Indonesia	9	9	⊜	Russian Federation	0	9	
Bulgaria	0	0	0	Iran	0	8	⊜	Saudi Arabia	8	9	
Canada	8	0	9	Iraq	9	9	8	Singapore	9	0	
Chile	0	8	8	Ireland	9	0	8	Slovak Republic	8	0	
China	0	8	⊜	Italy	9	⊜	0	Slovenia	0	9	
Chinese Taipei	0	0	0	Jamaica	⊜	8	⊜	South Africa	8	9	
Colombia	0	8	0	Japan	0	9	8	Spain	0	9	
Costa Rica	8	8	0	Kazakhstan	n a	n a	n a	Suriname	n a	n a	
Croatia	0	0	9	Korea	9	0	8	Sweden	9	9	
Cuba	n.a.	n.a.	n.a.	Kuwait	9	8	8	Switzerland	8	(2)	
Cyprus	0	0	0	Latvia	9	9	0	Syria	n.a.	n.a.	
Czech Republic	0	9	0	Libya	9	9	⊜	Thailand	8	⊜	
Denmark	0	0	0	Lithuania	0	0	0	Trinidad & Tobago	0	8	
Dominican Republic	8	8	8	Luxembourg	9	9	8	Tunisia	8	8	
Ecuador	0	0	0	Malaysia	9	0	⊜	Turkey	0	9	
Egypt	@	9	⊜	Malta	9	⊜	0	United Arab Emirates	9	8	
El Salvador	n.a.	n.a.	n.a.	Mexico	0	8	8	United Kingdom	8	9	
Estonia	0	9	0	Myanmar	n.a.	n.a.	n.a.	United States	0	9	
Finland	0	0	⊜	Netherlands	0	9	8	Uruguay	8	8	
France	0	0	0	New Zealand	0	0	8	Venezuela	0	0	
Gabon	n.a.	n.a.	n.a.	Nicaragua	(2)	⊜	⊜	Vietnam	8	8	
				Nigeria	@	@	@	Yemen	n a	n a	

**©**\$⊚ Submission

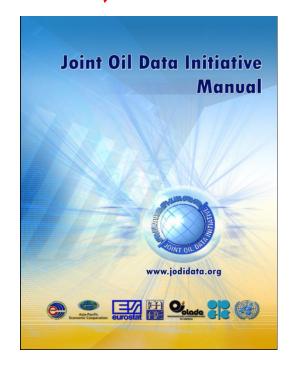
○○○ Timeliness

©⊜⊚ Completeness

© Good ⊚ Fair ⊗ Poor Not available (n.a.) when no submission from January 2010 to December 2010

Assessment for the period July-December 2010



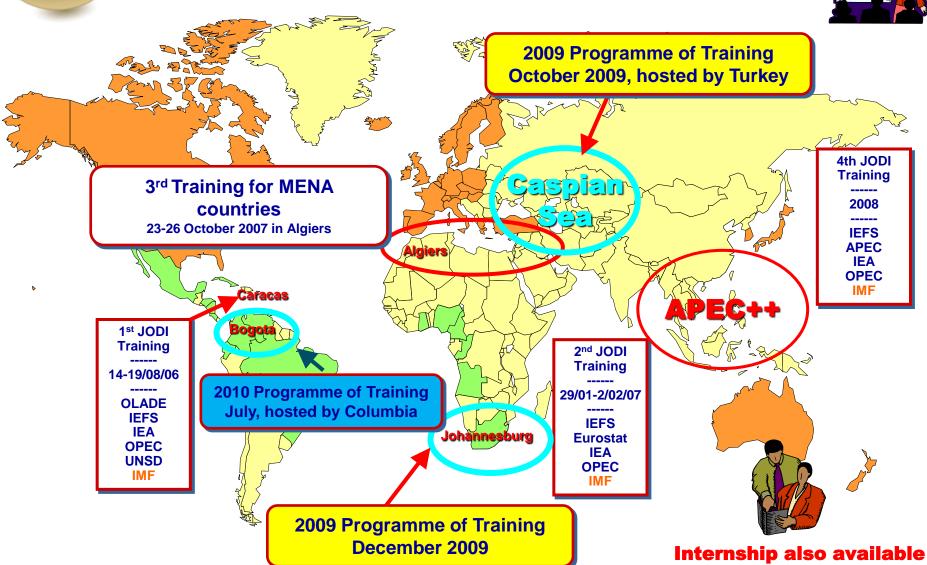


Improving Agency quality and

coverage

### Performance assessment and educative tools





Expanding Agency
JODI oil to
natural gas

and others

## A triple development



Organisations: APEC, Eurostat, IEF, IEA, OLADE, OPEC, UNSD, (GECF for gas)

**Expanding** JODI oil to natural gas and others

## Moving to an extended questionnaire

	Crude Oil			Petroleum Products							
	Crude Oil				Gasoline	Kerosene	Gas/Diesel Oil	Fuel Oil	Total Oil		
Production		Refinery	Refinery Output								
Imports		Imports	Imports								
Exports	xports		Exports								
Stocks Closing Change		Stocks	Closing Change								
Refinery Intake		Demand						·			

NGL Naphtha Product transfers Statistical Difference

Country	
Month	Unit:

								Petroleum Products									
		Crude Oil	NGL	Other	Total			LPG	Naphtha	Gasoline	Jet Kerosene	Kerosene	Gas/ Diesel Oil	Fuel Oil	Other Products	Total Products	
Production						Refinery Outp	ut										
From Other sources						Receipts											
Imports						Imports											
Exports						Exports											
Product Trans	fers/Backflows					Products Tran	sfers										
Direct Use						Inter Products	Transfers										
Stocks	Closing					Stocks	Closing										
SHUCKS	Change					SIUCKS	Change										
Statistical Difference						Statistical Difference											
Doffware Intoles						Потана											

Other = Refinery Feedstocks+ Additives + Other Hydrocarbons

Receipts = Primary Product Receipts + Recycled Products

Other Products= Refinery gas + Ethane + Petroleum Coke + Lubricants + White Spirit + Bitumen + Paraffin Waxes + Other Petroleum Products



**InterEnerStat** 

UNEP OPEC OECD (( Colade

### International Finergy Agency Jobi is much more than a database





+ the IEFS

Harmonisation + co-ordination

90+ Countries

**Enormous progress in many countries** 

Oil Companies
Oil Analysts

Strengthening of the links between companies, countries and analysts

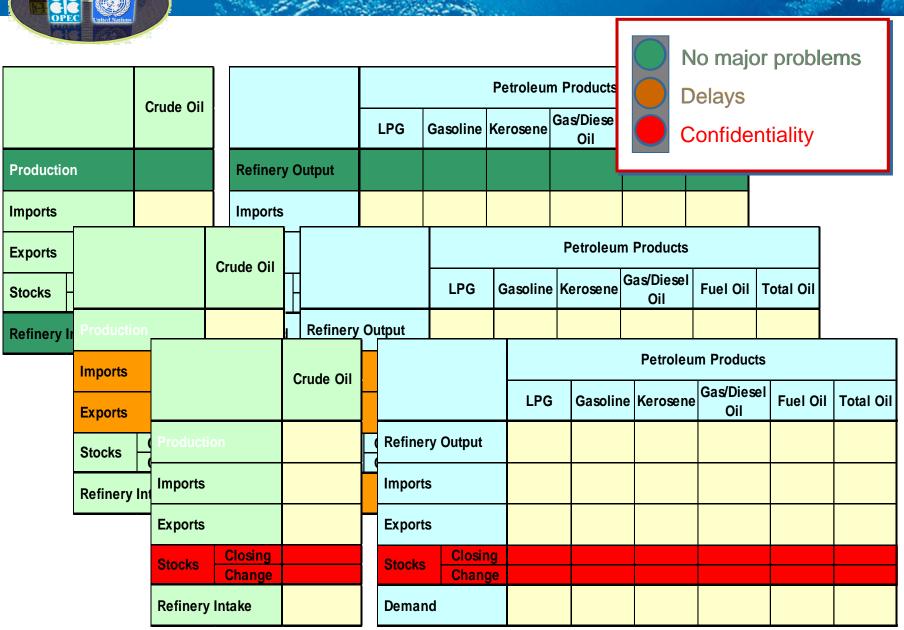
In 2011, JODI celebrated its 10<sup>th</sup> Anniversary.

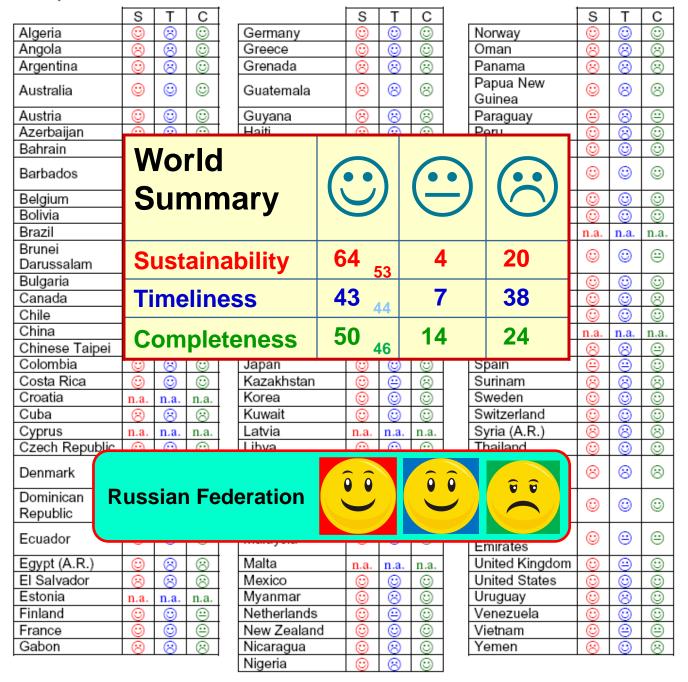
Countries and organisations should all be proud of this great achievement for the producer-consumer dialogue.





## But there are remaining issues...







### Smiley Faces Report shown at IEF meeting

What is the overall situation in terms of sustainability, timeliness and completeness?



# A quick overview of the Agenda

### **Opening**

Why a need for monthly oil and gas statistics

Why the Joint Organisations Data Initiative (JODI)?

Monthly oil and gas statistics

Monthly oil statistics in Russia

The process:
how to complete
monthly
statistics and
verify quality

What happens with the data

Closing



## A few words to conclude







- So the need to limit the collect of data to what is really needed
- Needs vary from country to country, from organisation to organisation
- The MOS has been established to meet the needs of OECD countries. So the importance for all OECD countries to prepare complete MOS questionnaires
- JODI meets the requests of a much broader group of users of oil statistics world wide
- So the importance for all countries, especially large producers and large consumers to fully participate in JODI. The March IEF Ministerial meeting will further raise the political and technical importance of JODI which will be extended to natural gas
- The emphasis of this workshop will then be on the practical aspect for completing both the MOS and the JODI questionnaires.

  Thank you