



مركز الإحصاء - أبوظبي
STATISTICS CENTRE - ABU DHABI



Energy and Environment Statistics 2010

Issued in January 2012

Notes and Symbols



\$	United States Dollars
AD	Abu Dhabi Emirate
ADGAS	Abu Dhabi Gas Liquefaction Company Ltd.
ADNOC	Abu Dhabi National Oil Company
ADWEA	Abu Dhabi Water and Electricity Authority
BTU	British Thermal Unit
EMAL	Emirates Aluminium
GASCO	Abu Dhabi Gas Industries Ltd.
GWH	Gegawatt per Hour
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MCM	Million Cubic Metres
MGD	Million Gallon Daily
MWH	Megawatt per Hour
na	Not Available
OHS	Occupational Health and Safety
TAKREER	Abu Dhabi Oil Refining Company

* Due to rounding, totals may not equal the sum of component parts.

* Unless otherwise indicated, all tables in this publication relate to the Emirate of Abu Dhabi. However, when mentioned in table titles or within table cells " Abu Dhabi" refers only to the Region of Abu Dhabi and not the whole Emirate.

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Introductaion



The Emirate of Abu Dhabi is considered one of the world's major oil producers ranking sixth worldwide in terms of proven oil reserves and seventh in terms of natural gas reserves. Revenues from oil is the main funding source for Abu Dhabi's sustainable development programs and income diversification. Natural gas also plays an important role in the rapid development of the Emirate mainly because natural gas serves as a fuel source for power generation as well as for manufacturing and petrochemical industries.

The government of Abu Dhabi accords particular attention to water and electricity activity and that is to meet the requirements for economic development, and provide safe access to water and electricity and promote the welfare of residents of Abu Dhabi Emirate. On the other hand, and according to economic activity demand, fuel consumption increases leading to an increase in the emissions of oil and gas sector and water and electricity activity. These two areas are the dominant source of air emissions in the Emirate of Abu Dhabi; however, emission levels remain within the safe limits.

1

Water and Electricity Statistics in Abu Dhabi Emirate

The Government of Abu Dhabi accords particular attention to the improvement and development of Abu Dhabi water and electricity supply activity. The current rapid development in this sector dates back to March 1998, when Abu Dhabi Water and Electricity Authority (ADWEA) was established as the higher supervisory authority regulating water and electricity supply. ADWEA serves more than 1.9 million people, over an area of approximately 67,340 square kilometres, about 87% of the UAE's total area. At the end of 2010, the total installed generation capacity of electricity was 9,247 MWH. The installed desalination capacity was 581 MGD at the end of 2010, excluding Al Fujairah stations.

1.1 Electricity Generation

Electricity production in Abu Dhabi Emirate increased by about 65% over the period 2005-2010 reaching a total production of 41,859 GWH in 2010 of which about 2,686 GWH being transferred to Northern Emirates. Electricity consumption in Abu Dhabi Emirate also increased by 54% during the aforesaid period reaching a total consumption of 39,173 GWH in 2010, including internal electrical consumption by power stations and technical losses through the network.

1.1. Electrical Power Statistics

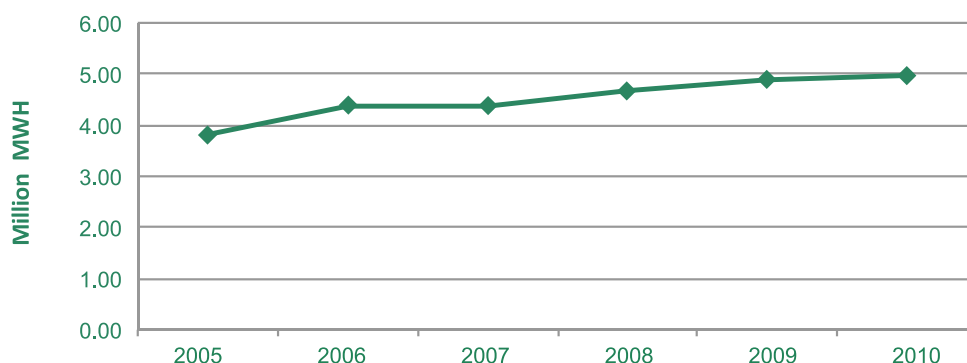
(MWH)

Item	2005	2006	2007	2008	2009	2010
Total Electricity Production by Companies	25,423,723	28,502,420	34,142,472	34,452,127	39,219,090	41,712,189
Net Electricity Transferred from Emal & Takreer	139	835,371	814,616	na	182,934	146,594
Total	25,423,862	29,337,791	34,957,088	34,452,127	39,402,024	41,858,783
Electricity Exports to Northern Emirates	na	2,014,773	5,614,875	2,974,627	4,685,857	2,685,643
Electricity Consumption in the Emirate of AD *	25,423,862	27,323,017	29,342,214	31,480,854	34,716,166	39,173,140
Electrical Consumption Per Capita	18.50	18.7	18.6	18.56	19.01	19.91
Electricity Planned Capacity (MW)	7,242	7,671	8,057	8,994	9,249	9,247

Source: Abu Dhabi Water and Electricity Company (ADWEC)

*Consumption includes internal electrical consumption by power stations & technical losses through the network

Figure (1.1) Internal Electricity Consumption by Power Plants



1.2 Fuel Consumption of the Water and Electricity Activity

Power and water desalination plants use different types of fuel to generate electricity, such as natural gas, crude oil, gas oil (diesel), and fuel oil. Fuel consumption increases along with the increase in electricity generation. Due to economic and environmental considerations, natural gas is the main fuel used in power generation, constituting 96% on average of the total fuel types used in generation in the period from 2005 to 2010. In 2010, total fuel consumption in power plants increased by 3.9% from 2009 reaching a total of 502,248 Billion BTU.

1.2. Fuel Consumption of the Water and Electricity Activity

(Billion BTU)

Description	2005	2006	2007	2008	2009	2010
Total	372,818	404,742	430,237	439,811	483,597	502,487
Natural Gas	370,973	360,039	414,062	438,757	469,726	467,126
Crude Oil	1,287	26,722	10,737	78	7,783	21,918
Gas Oil	557	11,841	3,003	894	5,239	13,438
Fuel Oil	1	6140	2435	82	849	4

Source: Abu Dhabi Water and Electricity Company

Figure: (1.2) Fuel Consumption of the Water and Electricity Activity



1.3 Electricity Generated by Solar Energy

By the end of 2010, electricity production from solar energy reached about 17,239 MWH out of which 74% was transmitted to the distribution network in Abu Dhabi Emirate and 26% was consumed internally by Masdar city.

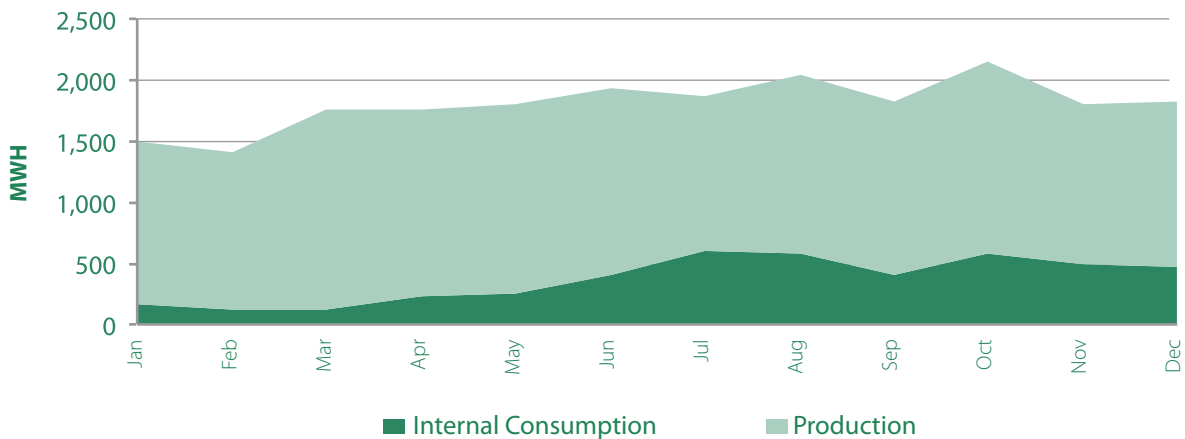
1.3. Electricity Generation and Consumption from Solar Energy

(MWH)

Item	2010
Electricity Production	17,239
Electricity Internal Consumption	4,411
Electricity Transferred to Distribution Network	12,828

Source: Abu Dhabi Future Energy Company - Masdar

Figure (1.3) Production and Internal Consumption of Solar Energy Plants, 2010



1.4 Electricity Consumption

The domestic sector ranked top regarding electricity consumption by sector in Abu Dhabi Emirate since 2005, followed by commercial and government sectors. The data presented in the table below shows that electricity consumption by the industrial sector is relatively low compared to the other sectors however, this does not reflect reality. Some large industrial facilities have their own power plants. TAKREER, Emal and some oil production companies, for example, have their own power plants.

In 2010, electricity consumption in Abu Dhabi Emirate reached 39,173 GHW. Abu Dhabi region consumed the largest share (64%), followed by Al Ain (23%) and Western Region (13%).

1.4. Electricity Consumption by Sector

(MWH)

Sector	2005	2006	2007	2008	2009	2010*
Total**	25,423,862	27,323,017	29,342,214	31,480,854	34,716,166	39,173,140
Domestic	9,919,427	10,660,405	11,448,220	12,281,327	13,544,932	15,283,875
Commercial	7,917,862	8,509,324	9,138,171	9,803,173	10,811,804	12,199,858
Government	4,326,170	4,649,333	4,992,923	5,356,267	5,907,364	6,665,771
Agriculture	2,292,501	2,463,750	2,645,824	2,838,365	3,130,400	3,532,291
Industry	752,456	808,664	868,425	934,976	1,027,475	1,159,385
Other	215,447	231,540	248,651	266,746	294,191	331,960

Source: Abu Dhabi Distribution Company and Al Ain Distribution Company

* Preliminary estimates

**Consumption includes internal electrical consumption by power stations and technical losses through the network

1.5. Electricity Consumption by Region

(MWH)

Region	2005	2006	2007	2008	2009	2010
Total Consumption*	25,423,862	27,323,017	29,342,214	31,480,854	34,716,166	39,173,140
Abu Dhabi	16,158,411	17,376,073	18,577,267	19,803,499	22,062,262	24,850,010
Al Ain	6,849,131	7,091,412	7,528,700	7,881,926	8,474,342	9,081,380
Western Region	2,416,320	2,855,532	3,236,247	3,795,429	4,179,562	5,241,750

Source: Abu Dhabi Distribution Company and Al Ain Distribution Company

*Consumption includes internal electrical consumption by power stations and technical losses through the network

1.5 Production of Desalinated Water

Production of desalinated water in Abu Dhabi Emirate increased by 31% during the period 2005-2010 reaching a total of 834.5 MCM in 2010. However, 2010 production decreased by about 1.3% from 2009 production. On the other hand, Total desalinated water available in Abu Dhabi Emirate increased in 2010 reaching 962.8 MCM.

1.6. Production of Desalinated Water

(Million Cubic Metres)

Item	2005	2006	2007	2008	2009	2010
Total of Available Desalinated Water	742.1	802.2	853.3	903.1	961.3	962.8
Production	636.9	670.5	719.4	784.5	845.4	834.5
Supply from Al - Fujairah Station	105.2	131.7	133.9	118.6	115.9	128.3

Source: Abu Dhabi Water and Electricity Company

1.6 Consumption of Desalinated Water

In 2010, the annual consumption of desalinated water in Abu Dhabi Emirate reached about 873 MCM with a daily average consumption of 2.39 MCM and a daily per capita average consumption of 1.2 cubic metres. By region, Abu Dhabi region came first consuming about 61% of the total water consumed followed by Al Ain and Western Region with 26% and 13% respectively. By sector, the domestic sector consumption was the highest in the Emirate consuming about 68% of the total reaching a total of 596 MCM and a daily average of 1.63 MCM. The government sector ranked second with 17% and the commercial sector came third with 9%.

1.7. Consumption of Desalinated Water

(Million Cubic Metres)

Year	Annual Consumption	Average Daily Consumption
2000	340.38	0.93
2001	414.09	1.13
2002	462.70	1.27
2003	510.79	1.40
2004	583.70	1.59
2005	667.03	1.83
2006	722.14	1.98
2007	756.65	2.07
2008	773.75	2.11
2009	790.02	2.16
2010*	872.98	2.39

Source: Abu Dhabi Water and Electricity Company, Statistics Centre - Abu Dhabi

* Preliminary estimates

1.8. Consumption of Desalinated Water by Region

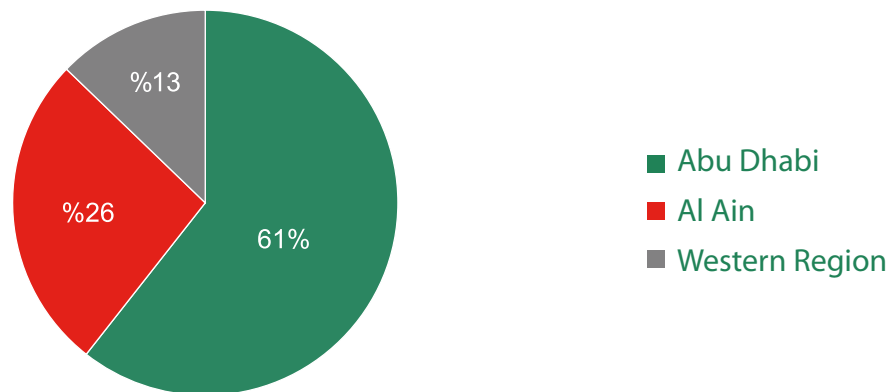
(Million Cubic Metres)

Region	2005	2006	2007	2008	2009	2010*
Total Consumption	667.0	722.1	756.7	773.8	790.0	873.0
Abu Dhabi	413.9	481.1	469.5	480.1	490.2	529.0
Al Ain	161.2	153.5	182.8	186.9	190.9	232.2
Western Region	92.0	87.6	104.3	106.7	108.9	111.7

Source: Abu Dhabi Water and Electricity Company

* Preliminary estimates

Figure (1.4) Consumption of Desalinated Water by Region, 2010



1.9. Consumption of Desalinated Water by Sector

(Million Cubic Metres)

Sector	2005	2006	2007	2008	2009	2010*
Total	667.0	722.1	756.7	773.8	790.0	873.0
Domestic	456.0	493.7	517.2	528.9	540.1	596.2
Commercial	63.7	69.0	72.3	73.9	75.5	82.3
Government	112.3	121.6	127.4	130.3	133.0	146.3
Agriculture	22.8	24.7	25.9	26.5	27.0	32.4
Industry	4.5	4.9	5.1	5.2	5.3	5.7
Other Sectors	7.7	8.4	8.8	9.0	9.1	10.1

Source: Abu Dhabi Distribution Company, Al Ain Distribution Company

* Preliminary estimates

Figure (1.5) Per Capita Average Daily Consumption of Desalinated Water



1.7 Carbon Dioxide Emissions

Since 2006, the water and electricity production sector in the Emirate of Abu Dhabi is witnessing in general a decrease in per capita carbon dioxide emissions which reached in 2010 about 13.77 tons. For the same year, total emissions of carbon dioxide from the sector reached about 27.1 million tons.

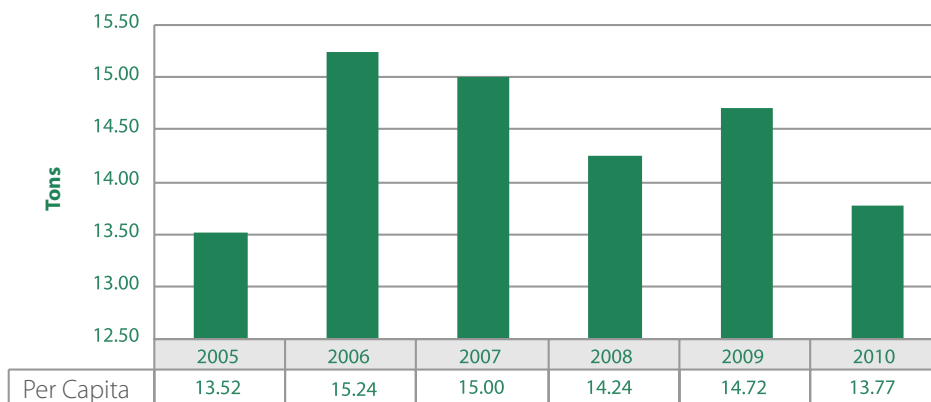
1.10. Carbon Dioxide Emissions - Water and Electricity Production Sector

(Million Tons)

Source	2005	2006	2007	2008	2009	2010
Total	19.76	22.27	23.62	24.15	26.88	27.10
Arabian Power Company	7.25	8.15	7.66	6.49	7.23	8.04
Shuweihat CMS International Power Company	2.31	4.36	4.50	4.58	5.25	5.31
Emirate s CMS Power Company	2.66	2.75	2.63	2.57	2.39	2.49
Gulf Total Tractebel Power Company	3.05	2.86	3.90	3.87	3.87	4.08
Taweelah Asia Power Company	3.97	3.55	4.22	5.65	7.00	7.17
Al Mirfa Power and Distillation Plant	0.45	0.53	0.68	0.98	1.14	0.01
Zayed City Energy Plant	0.07	0.07	0.03	0.01	0.00	na

Source: Abu Dhabi Water and Electricity Authority - ADWEA

Figure (1.6) Per Capita Carbon Dioxide Emissions - Water and Electricity Production Sector



1.8 Air Pollutant Total Emissions

Total air pollutant emissions adds up together the total emissions of sulphur dioxide, nitrogen oxides, and volatile organic compounds. Total air pollutant emissions from water and electricity production sector fluctuated over the years since 2004 between increasing and decreasing, however the general trend of these emissions is gradually decreasing. In 2010, the total emissions decreased by 10.9% from 20,094 tons in 2009 to 17,910 tons in 2010.

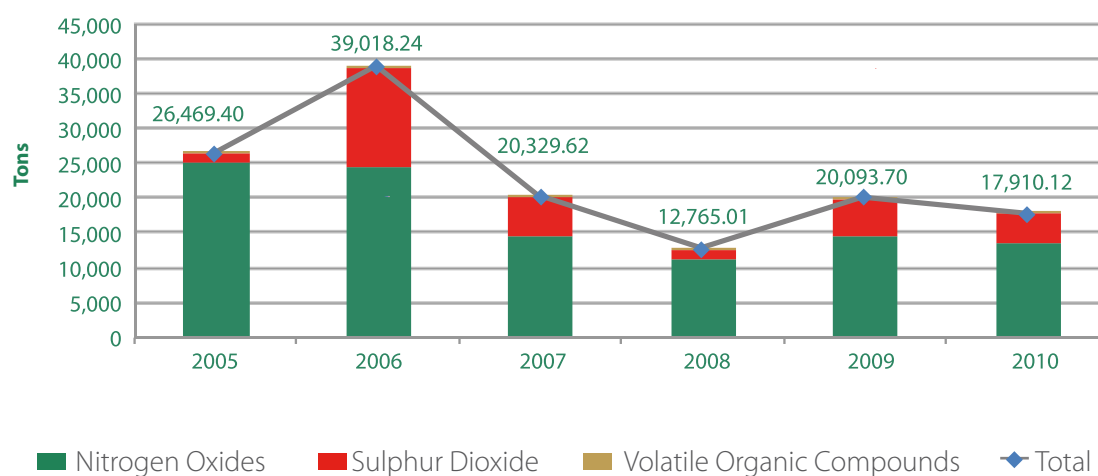
1.11. Air Pollutant Total Emissions - Water and Electricity Production Sector

(Tons)

Year	Total	Sulphur Dioxide	Nitrogen Oxides	Volatile Organic Compounds
2004	6,516.78	270.89	6045.23	200.66
2005	26,469.40	1141.07	25161.27	167.06
2006	39,018.24	14369.72	24490.5	158.02
2007	20,329.62	5606.26	14512.77	210.59
2008	12,765.01	1233.47	11307.25	224.29
2009	20,093.70	5383.04	14479.63	231.03
2010	17,910.12	4240.03	13481.088	189.00

Source: Abu Dhabi Water and Electricity Authority - ADWEA

Figure (1.7) Air Pollutant Total Emissions - Water and Electricity Production Sector



1.9 Occupational Health and Safety

In 2010, the number of Lost Time Injury Incidents in the companies working in water and electricity activity under ADWEA reached 22 incidents increasing by 16% from 2009. There were three more fatality incidents in 2010 compared to 2009 whereas the number of Road Traffic Incidents is 63% less. One disability incident has been recorded in 2010.

1.12. Number of Occupational Health and Safety Incidents - Water and Electricity Production Sector

Item	2005	2006	2007	2008	2009	2010
Fatality Incidents	1	2	0	3	3	6
Fatality Non Recordable	0	0	0	0	0	0
Disability Incident	0	0	0	0	0	1
Lost Time Injury Incidents	9	15	18	27	19	22
Medical Treatment Case	5	18	43	290	531	472
Restricted Workday Case	0	2	2	3	4	1
Serious Near Miss	4	18	75	66	72	51
Journey Incident	0	0	0	0	3	0
Reporting Dangerous Occurrence	0	5	6	6	9	4
Occurrence of Occupational Disease	0	0	0	0	0	0
Road Traffic Incidents	44	14	15	15	8	3
Other (near miss)	43	78	206	948	1,423	545

Source: Abu Dhabi Water and Electricity Authority - ADWEA

1.13. Rate of Injuries and Incidents Registered Per Million Man-Hours Worked - Water and Electricity Production Sector

Item	2005	2006	2007	2008	2009	2010
Number of Working Hours (Million Hours)	9.85	20.99	25.08	36.85	50.57	42.13
Lost Time Injury Frequency Rate (LTIFR)	0.91	0.71	0.72	0.73	0.38	0.52
Lost Time Injury Severity Rate (LTISR)	2.10	4.20	14.40	6.10	4.70	17.10
Total Reportable Case Frequency (TRCF)*	0.10	1.00	1.70	8.00	10.60	11.30

Source: Abu Dhabi Water and Electricity Authority - ADWEA

*Includes Fatal Accident Rate (FAR)

2

Oil and Gas Statistics in Abu Dhabi Emirate

In 1958, Oil was first discovered in the emirate of Abu Dhabi in Commercial quantities. Since then the Emirate has been able to achieve remarkable progress in the investment and development of its oil wealth and natural gas. In 2010, the emirate of Abu Dhabi produced 823,075 thousand barrels of crude oil and exported 90.5% of its total production to other countries. The average prices of crude oil increased by 25% from the year 2009 reaching an average of 78.5 \$/ Barrel.

2.1 Crude Oil Production and Exports

Exports of crude oil constituted about 90.5% of 2010 total production. In 2010, the total production increased by 24,075 thousand barrels, an increase of 3% from the year 2009.

2.1. Crude Oil Production and Exports

(Thousand Barrels)

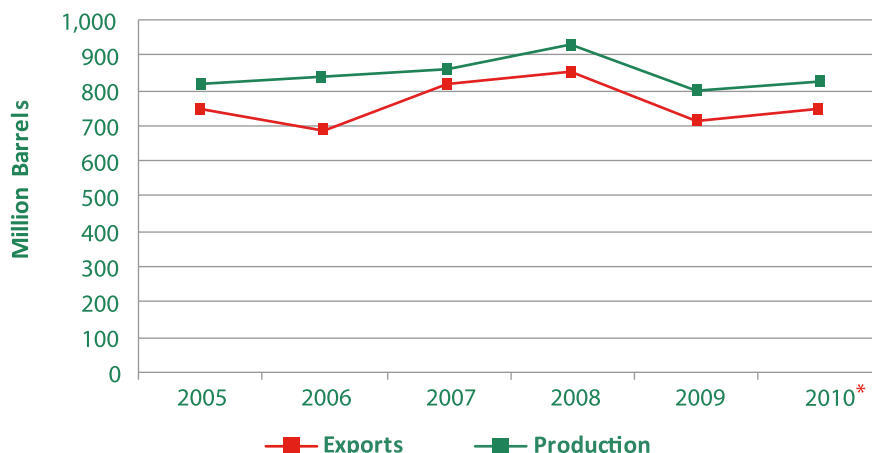
Year	Production		Exports	
	Daily Average	Annual Production	Daily Average	Annual Exports
2005	2,242	818,330	2,052	749,080
2006	2,298	838,770	1,878	685,470
2007	2,365	863,225	2,233	814,939
2008	2,536	928,000	2,329	852,072
2009	2,189	799,000	1,953	712,994
2010*	2,255	823,075	2,040	744,525

Source: Abu Dhabi National Oil Company - ADNOC

Note: Production excludes condensates.

* Preliminary estimates

Figure (2.1) Production and Exports of Crude Oil



2.2 Crude Oil Prices

Crude oil prices average increased from 62.7 US\$ in 2009 to 78.5 US\$ in 2010. Also, in the year 2010, the prices of all types of crude oil increased with a percentage ranging from 24% to 26%. Umm Al Shaif recorded the highest increase, increasing by 16.4 US\$ from 2009.

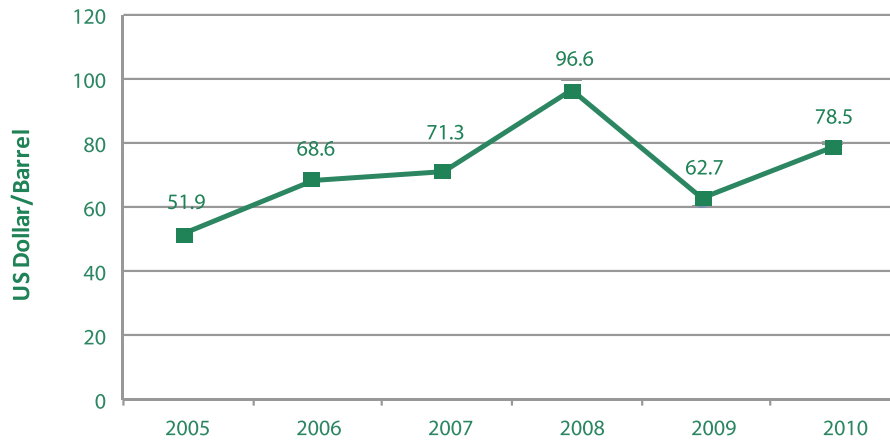
2.2. Crude Oil Prices by Type

(US\$/Barrel)

Type of Crude	2005	2006	2007	2008	2009	2010
Murban	53.1	69.8	72.5	97.8	63.5	79.2
Umm Al Shaif	52.5	69.0	71.8	96.9	62.3	78.7
Lower Zakum	53.1	69.8	72.5	97.8	63.5	79.0
Upper Zakum	49.0	65.6	68.3	93.9	61.4	77.3

Source: Abu Dhabi National Oil Company - ADNOC

Figure (2.2) Average Prices of Crude Oil



2.3 Petroleum Products

Refined petroleum products, such as naphtha, gas oil, fuel oil, and jet kerosene are produced by Abu Dhabi Refining Company (TAKREER) which operates two oil refineries; Abu Dhabi Refinery and Ruwais Refinery. Abu Dhabi's Production oil products increased by 7% in 2009 compared to 2008. Sales to other emirates accounted for about 20% of total domestic sales.

2.3. Production of Refined Petroleum Products

(Thousand Metric Tons)

Product Type	2005	2006	2007	2008	2009
Total	18,034.0	20,998.0	17,961.0	16,380.2	17,467.5
LPG	488.0	566.0	604.0	509.3	521.4
Unleaded Gasoline	1,429.0	2,621.0	2,373.0	2,163.5	2,440.0
Naphtha	4,669.0	4,621.0	3,749.0	3,684.7	3,804.3
Jet Fuel / Kerosene	5,494.0	5,519.0	5,070.0	4,895.2	5,302.4
Gas Oil / diesel	4,217.0	4,427.0	4,210.0	4,138.8	4,336.1
Heavy Fuel Oil	1,689.0	3,204.0	1,870.0	904.9	1,022.2
Lubricants	48.0	40.0	43.0	46.0	na
Sulphur	na	na	42.0	37.8	41.1

Source: ADNOC Co, ADNOC Fod Co, Takreer

2.4. Domestic Sales of Refined Petroleum Products

(Million Imperial Gallons)

Product Type	Abu Dhabi Emirate		Other Emirates	
	2008	2009	2008	2009
Total	1,528.4	1,593.0	465.3	402.3
LPG	49.9	57.5	12.1	4.8
Unleaded Gasoline	447.1	500.1	154.2	173.5
Jet fuel / Kerosene	430.3	468.5	83.9	69.8
Gas oil / diesel	575.2	557.5	213.3	153.2
Heavy Fuel Oil	17.3	2.1	0.8	na
Lubricants	8.6	7.3	1.0	1.1

Source: ADNOC Co, ADNOC Fod Co, Takreer

2.4 Natural Gas

GASCO and ADGAS companies are two subsidiary companies of ADNOC engaged in the extraction of natural gas which has several uses in the Abu Dhabi Emirate. From natural gas, liquefied fuels and products such as propane, butane and pentane are produced, with most of them being exported. Such fuels are also used in the industry of steel, aluminium and cement. Some of the natural gas is injected back into oil wells in order to increase their production and stabilise their oil reserves.

2.5. Natural Gas Production and Usage

(Million Cubic Feet)

Year	2005	2006	2007	2008	2009*
Production					
Annual	2,069,550	2,118,825	2,157,550	2,076,642	1,768,975
Daily	5,670	5,805	5,911	5,674	4,847
Usage					
Annual	1,903,986	1,983,370	2,049,673	1,972,810	1,733,595
Daily	5,216	5,434	5,616	5,390	4,750

Source: Abu Dhabi National Oil Company - ADNOC

* Preliminary estimates

2.6. Production and Exports of Liquefied Natural Gas Products by Product Type

(Thousand Metric Tons)

Product Type	2008		2009		2010	
	Production	Exports	Production	Exports	Production	Exports
Total	15,690	13,771	14,778	14,193	15,223	14,604
LNG	5,918	5,483	5,467	5,410	5,631	5,567
Propane	3,227	3,190	2,920	2,871	3,007	2,954
Butane	2,957	2,903	2,832	2,689	2,917	2,767
Pentane (plus)	1,847	1,829	1,822	1,843	1,877	1,896
Others (sulphur)	1,741	366	1,738	1,380	1,790	1,420

Source: Abu Dhabi National Oil Company - ADNOC

Note: Excluding condensates.

2.5 Petrochemical Products

The Emirate's basic petrochemical products include polyethylene and fertilizers such as urea and ammonia. In 2009 polyethylene shared about 40.7% of total volume of petrochemical production whereas urea and ammonia constituted about 27.8% and 31.5% respectively.

2.7. Production of Petrochemical Products by Product Type

(Metric Tons)

Product Type	2005	2006	2007	2008	2009
Total	2,053,799	2,236,382	1,670,197	1,658,919	1,354,595
Ammonia	425,173	460,606	454,212	456,691	426,669
Urea Fertilizer	589,826	638,976	640,496	618,377	375,621
Polyethylene	1,038,800*	1,136,800*	575,489	583,851	552,305

Source: Abu Dhabi National Oil Company - ADNOC

*Including Ethylene

2.8. Domestic Sales of Petrochemical Products by Product Type

(Metric Tons)

Product Type	2005	2006	2007	2008	2009
Total	43,538	47,249	113,879	121,372	81,851
Urea Fertilizer	43,538	47,249	62,355	62,318	29,299
Polyethylene	na	na	51,524	59,054	52,552

Source: Abu Dhabi National Oil Company - ADNOC

2.6 Carbon Dioxide Emissions

Since 2006, the oil and gas sector maintained its emissions around the same level, and in 2010 per capita carbon dioxide emissions decreased by 25.7% reaching 11.68 tons for the same period.

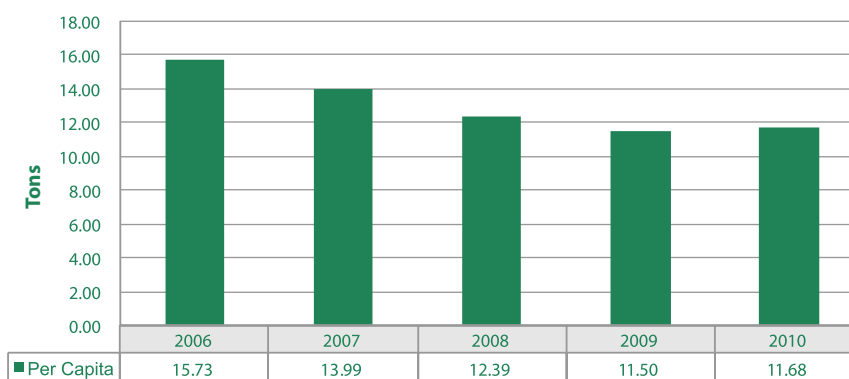
2.9. Carbon dioxide Emissions - Oil and Gas Sector

(Million Tons)

Business Sector	2006	2007	2008	2009	2010
Total	23.0	22.0	21.0	21.0	23.0
Exploration and Production	16.0	15.0	15.0	14.0	15.0
Independent Operators	1.0	1.0	1.0	1.0	1.0
Marketing & Refining	5.0	5.0	4.0	5.0	4.0
Petrochemicals	1.0	1.0	1.0	1.0	3.0

Source: Abu Dhabi National Oil Company - ADNOC

Figure (2.3) Per Capita Carbon Dioxide Emissions - Oil and Gas Sector



2.7 Air Pollutant Total Emissions

In the oil and gas sector, the general trend of air pollutant total emissions shows a decrease during the period (2004 -2010). Total emissions include the emissions of sulphur dioxide, nitrogen oxides, and volatile organic compounds resulting from the economic activities related to oil and gas sector, and in 2010 the total emitted gases reached a total 340,093 tons.

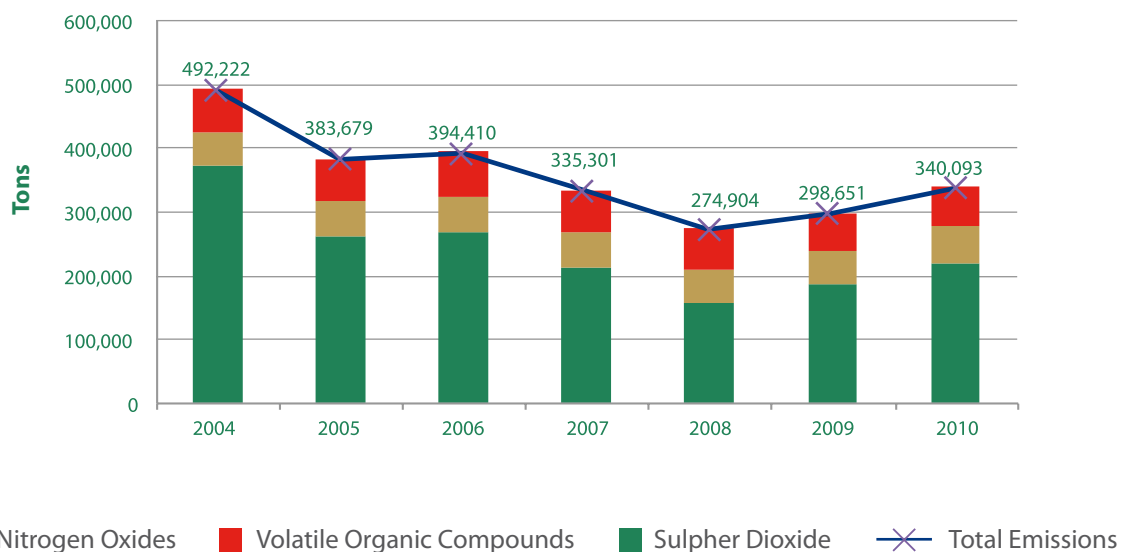
2.10. Air Pollutant Total Emissions - Oil and Gas Sector

(Tons)

Year	Total	Sulphur Dioxide	Nitrogen Oxides	Volatile Organic Compounds
2004	492,222	371,328	55,176	65,718
2005	383,679	262,539	56,225	64,915
2006	394,410	267,739	57,332	69,339
2007	335,301	212,722	55,881	66,698
2008	274,904	156,674	52,755	65,475
2009	298,651	185,870	54,782	57,999
2010	340,093	219,022	58,901	62,170

Source: Abu Dhabi National Oil Company - ADNOC

Figure (2.4) Air Pollutant Total Emissions - Oil and Gas Sector



2.8 Occupational Health and Safety

In 2010, ADNOC's Lost Time Injury Incidents was 66 decreasing by 12% from 2009. Road Traffic Incidents increased by 31% from 135 in 2009 to 177 in 2010. The Lost Time Injury Frequency Rate (LTIFR) and the Fatal Accident Rate (FAR) for 2010 were the lowest in the last six years.

2.11. Number of Occupational Health and Safety Incidents - Oil and Gas Sector

Item	2005	2006	2007	2008	2009	2010
Fatality Incidents	6	5	4	4	7	4
Fatality Non Recordable	na	8	5	9	7	11
Disability Incident	0	0	2	2	1	0
Lost Time Injury Incidents	53	57	58	68	75	66
Medical Treatment Case	123	107	141	114	93	144
Restricted Workday Case	41	42	53	48	44	58
Serious Near Miss	na	na	na	na	164	131
Journey Incident	na	na	na	na	na	na
Reporting Dangerous Occurrence	na	na	na	na	na	na
Occurrence of Occupational Disease	na	na	na	na	na	na
Road Traffic Incidents	171	93	116	169	135	177
Other (near miss)	na	na	na	na	24,255	30,055

Source: Abu Dhabi National Oil Company - ADNOC

2.12. Rate of Injuries and Incidents Registered Per Million Man-Hours Worked - Oil and Gas Sector

Item	2005	2006	2007	2008	2009	2010
Number of Working Hours (Million Hours)	171.00	191.00	230.00	298.00	313.00	355.00
Lost Time Injury Frequency Rate (LTIFR)	0.31	0.30	0.25	0.23	0.24	0.19
Lost Time Injury Severity Rate (LTISR)	na	na	na	na	na	na
Total Reportable Case Frequency (TRCF)	1.27	1.08	1.09	0.79	0.68	0.76
Fatal Accident Rate (FAR)	3.50	2.62	1.74	1.34	2.23	1.13

Source: Abu Dhabi National Oil Company - ADNOC

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