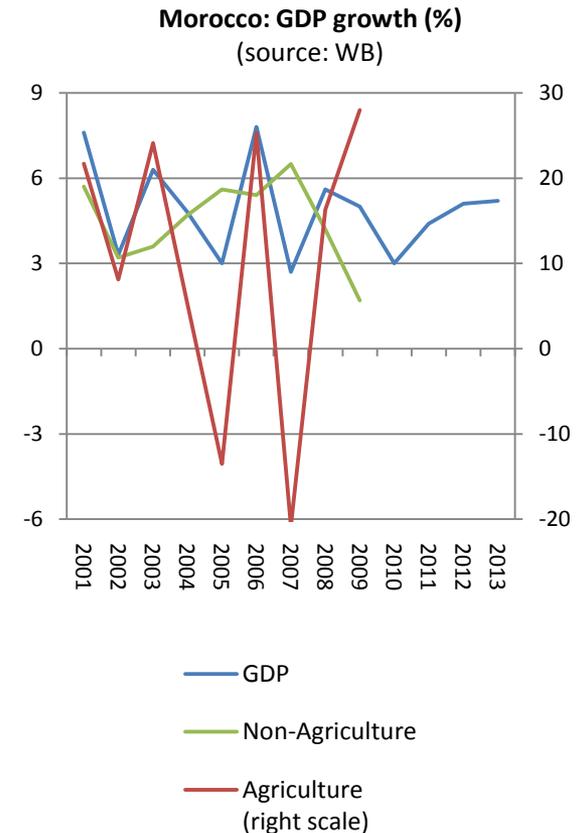


# **Power Sector Financial Vulnerability Assessment**

**Impact of the Credit Crisis on  
Investments in the Power Sector:  
the Case of Morocco**

# Macro Update: Moderate Crisis Impact...

- In light of the global crisis, recent growth performance in Morocco has been good
- Economic growth in 2008 reached 5.6%, lower than the 6.8% expected in Budget Law, but better than the low 2.7% of 2007
- This good performance is mainly due to a good agricultural output (+16% vs. -21% in 2007), thanks to good climatic conditions. Agriculture accounts for approximately 15% of the Moroccan GDP
- The non-agricultural sector remained robust, but less than projected due to the crisis: +4.2% in 2008, vs. +6.5% in 2007
- Exporting industries are directly hit by the crisis (textile, auto parts, etc.), as well as tourism and remittances from Moroccan workers living abroad (MRE). The phosphate sector is experiencing a sharp drop in production, export volumes and prices
- Available data for 2009 confirm that the economy has suffered only moderately: growth edged down to 3.7% in Q1, but has rebounded to 5.4% in Q2 and 6.1% in Q3. This is due to a very good harvest, a firming of domestic demand and, to a lesser extent, slight recovery of external demand during the last few months (manufacturing and tourism)
- For the full year 2009, GDP growth should reach 5%, mostly owing to the outstanding agricultural output and a moderate contribution from dynamic activities such as construction, financial services, telecoms and tourism
- Based on the assumption of a normal year for the agriculture in 2010 (i.e. much less favorable than 2009) and moderate but continued impact of the economic downturn on the non-agriculture sector, GDP growth should edge down at 3% in 2010
- Morocco's GDP growth should then start to recover, and be back to the 5% medium term trend from 2012 on

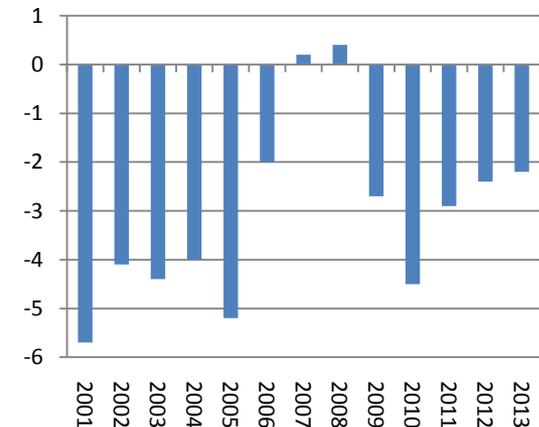


# Macro Update:

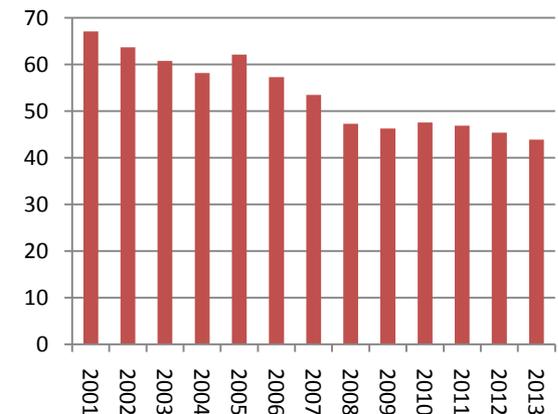
## ...And Well Managed Public Finances...

- Reform efforts of expenditure and tax management, as well as sound debt management in the past few years have been critical in maintaining public finances on a sustainable path
- Since 2005, Morocco maintained sound fiscal policies and continued to address fiscal risks. As a result, public finances were in slight surplus in 2007 (+0.2% of GDP) and 2008 (+0.4% of GDP), despite record high subsidies
- Furthermore, Morocco adopted a prudent debt strategy that allowed the central government debt to steadily decline from 62% of GDP in 2005 to 47% in 2008
- In addition, the government pursued appropriate monetary policy and enhanced financial sector supervision
- Morocco also implemented specific sector strategies aimed at increasing investment and productivity. Investment in key sectors (telecoms, real estate and construction, financial services, mechanical and electrical engineering, etc.) posted high growth rates during 2001-2008, leading to improved diversification and growth potential of the economy, and reduced volatility
- The external position of Morocco remains solid despite the deterioration of the current account due to the impact of the crisis. Net foreign reserves declined from end 2007 to end 2008, and since then have remained more or less stable. At end September 2009, they stood at the comfortable level of 7.7 months of imports of goods and non-factor services
- On the basis of these achievements, Morocco rating by the main agencies has remained stable despite the crisis, at just below investment grade (BB+/Ba1\*)

**Morocco: Fiscal deficit**  
(% GDP, source: WB)



**Morocco: Public debt**  
(% GDP, source: WB)



\* Standard & Poor's/Moody's

# Macro Update:

## ...Allowing Stimulus Package...

- The support package mostly includes a 10% wage increase for civil servants at the lower end of salary scale
- Other measures include decreased marginal rate for income tax, 10% increase for private sector minimum wage, 20% increase for minimum pension payments, etc.
- Affected firms are eligible to direct support: loan guarantees, debt rescheduling, subsidies for training and marketing, etc.
- Monetary measures include reduced reserve requirements for banks (from 15% before crisis to 8% in October 2009)
- Total cost of package is approximately 2.2% of GDP

# Macro Update:

## ... While Preserving Fiscal Space

- The ongoing fiscal consolidation and the overall public sector management reform, implemented with World Bank support, are crucial for preserving and broadening the fiscal space. Measures include reforming the tax regime, reducing the public wage bill, reducing energy subsidies, replacing food subsidies with targeted support to vulnerable groups, and introducing performance based budgeting
- Budget deficit should be limited to around 2.7% in 2009 despite falling revenues and the introduction of the stimulus package, thanks to large savings on subsidies, thanks to the downturn of world commodity prices, and controlled government expenditures. It would reach 4.5% in 2010, and improve thereafter
- The financing needs stemming from higher budget deficit in 2010, and declining deficits in the medium term, will be easily financed through domestic markets, as well as increased drawings on external loans. Since 2006, the government slightly changed its debt strategy in favor of external borrowings, especially multilateral and concessional, in order to ease the pressure on domestic financial markets. This is consistent with the intention to maintain a comfortable level of foreign reserves. A comprehensive public debt sustainability analysis carried out by the World Bank showed that the fiscal framework is robust to downside risk in the medium term
- Morocco's external position is also expected to remain sustainable over the medium term, as the country would reap the fruits of its continued reform efforts, its sound macroeconomic and fiscal policies, and targeted sector strategies

<b>Central Government</b>						
% GDP	2008	2009	2010	2011	2012	2013
<i>Uses of capital</i>						
Budget deficit	-0.4	2.7	4.5	2.9	2.4	2.2
Domestic debt repayment	8.3	6.8	6.7	6.7	6.6	6.3
External debt repayment	1.4	0.8	0.9	0.8	0.9	0.9
<b>Total</b>	<b>9.3</b>	<b>10.3</b>	<b>12.1</b>	<b>10.4</b>	<b>9.9</b>	<b>9.4</b>
<i>Sources of capital</i>						
Domestic debt	6.1	8.0	9.3	8.2	7.7	7.6
External debt	2.0	2.1	1.9	1.4	1.3	1.0
Other (privatization, etc.)	1.3	0.2	0.9	0.9	0.8	0.8
<b>Total</b>	<b>9.4</b>	<b>10.3</b>	<b>12.1</b>	<b>10.5</b>	<b>9.8</b>	<b>9.4</b>

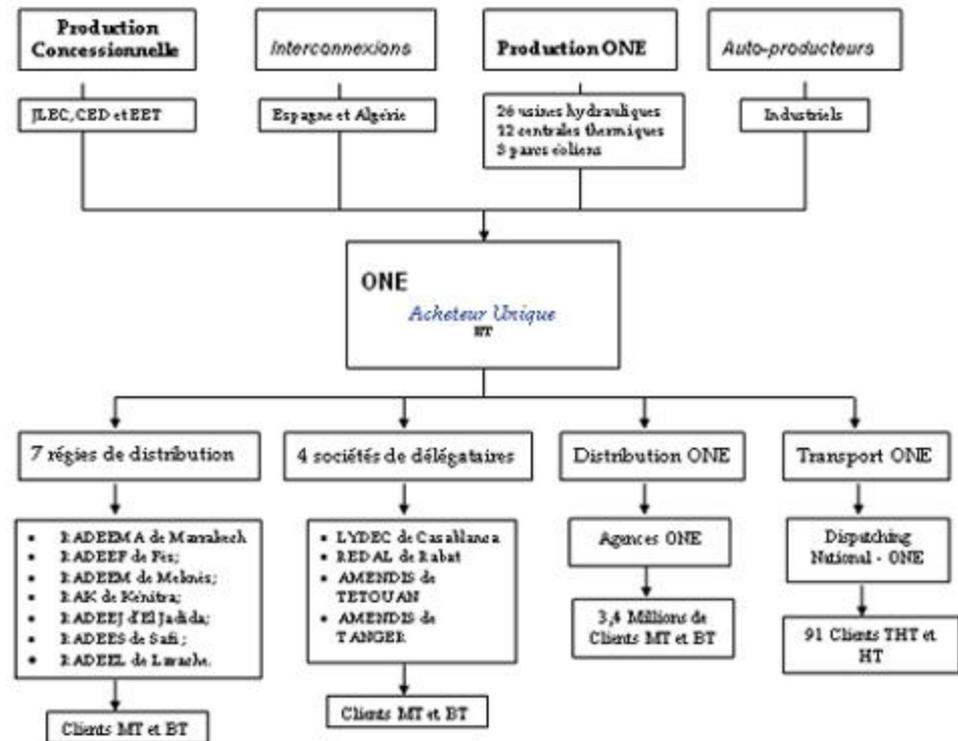
<b>Morocco</b>						
% GDP	2008	2009	2010	2011	2012	2013
<i>Uses of capital</i>						
Current account deficit	5.4	5.8	5.3	4.8	4.1	3.2
External debt repayment	3.9	2.0	2.0	1.9	2.0	1.9
Change in external reserves	-0.9	-2.2	-0.4	-0.7	-0.3	0.2
<b>Total</b>	<b>8.4</b>	<b>5.6</b>	<b>6.9</b>	<b>6.0</b>	<b>5.8</b>	<b>5.3</b>
<i>Sources of capital</i>						
External debt	5.1	3.8	3.8	2.9	2.5	2.0
Private investment	2.2	1.5	2.6	2.8	2.9	3.0
Official capital grants & other	1.1	0.3	0.4	0.3	0.3	0.3
<b>Total</b>	<b>8.4</b>	<b>5.6</b>	<b>6.8</b>	<b>6.0</b>	<b>5.7</b>	<b>5.3</b>

source: WB

# Power Sector Structure:

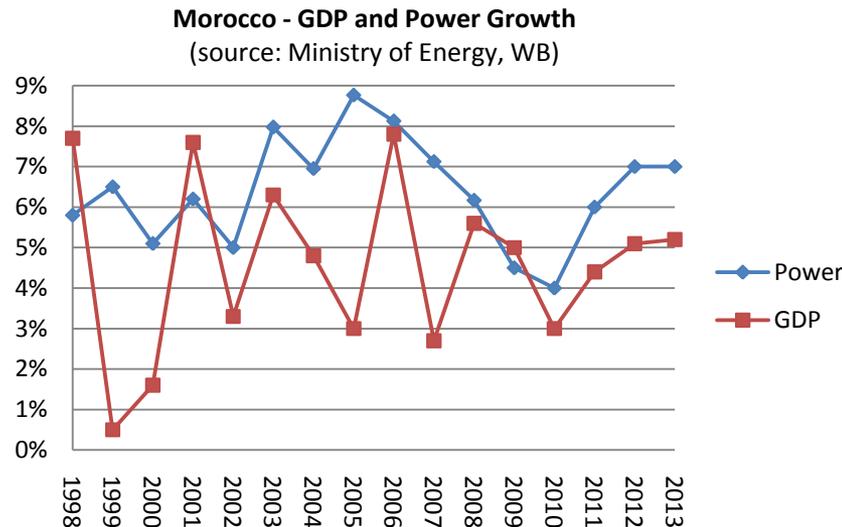
## Significant Private Sector Role

- Office National de l'Electricité (ONE), a State owned entity (EPIC: “Etablissement Public à caractère Industriel et Commercial”), is the main player of the power sector in Morocco. It holds a monopoly in transmission
- Since 1994, ONE has been allowed to sign contracts with private players in generation. Private generators currently account for about 68% of the electricity produced in Morocco
- In the distribution segment, municipal operators have been active since 1961 (“régies autonomes de distribution”), and private operators since 1997 (“gestionnaires délégués”). ONE is in charge of distribution in rural areas and in a few urban centers (37% of total demand in 2006), and of direct delivery to around 90 large customers (16% of total demand). Private and municipal distributors account for 46% of total demand



# Demand: Strong Growth to Continue

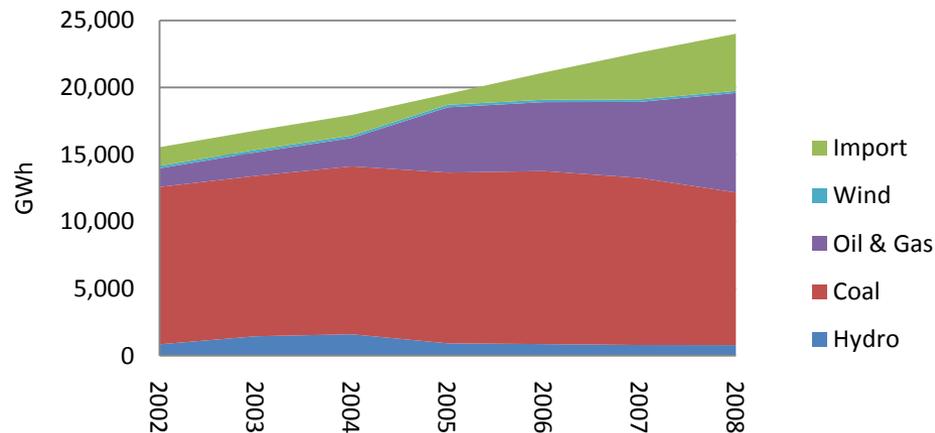
- During the past two decades, power demand grew by an average of just above 6% per year, while GDP grew by about 3.5% per year. In the past 10 years, growth accelerated: almost 4.5% p.a. for the GDP and almost 7% p.a. for power
- The fast growth of power demand in the past decade can be partly explained by the rural electrification program (PERG), which is now almost completed (96% of villages electrified in 2008 vs. around 20% in the mid-1990s)
- As of March 31, 2009, while the GDP was still growing (+4.7% on an annual basis), absolute power demand in Morocco was slightly below March 2008 level (-0.3%). Demand in the residential sector has been healthy (+6.4%), but it has been decreasing in the industry (-2%). It was also relatively moderate in agriculture, as the good hydraulic situation allows for less irrigation pumping
- The first quarter of 2009 is seen as exceptional, given the abnormally low level of activity in the phosphate industry. For the whole year, power demand is still expected to grow significantly (4-5%), in line with GDP
- The World Bank and the IMF are expecting a 5-6% GDP growth trend from 2012 on. This is in line with recent assumptions from the Moroccan Ministry of Energy for power: around 7% per year



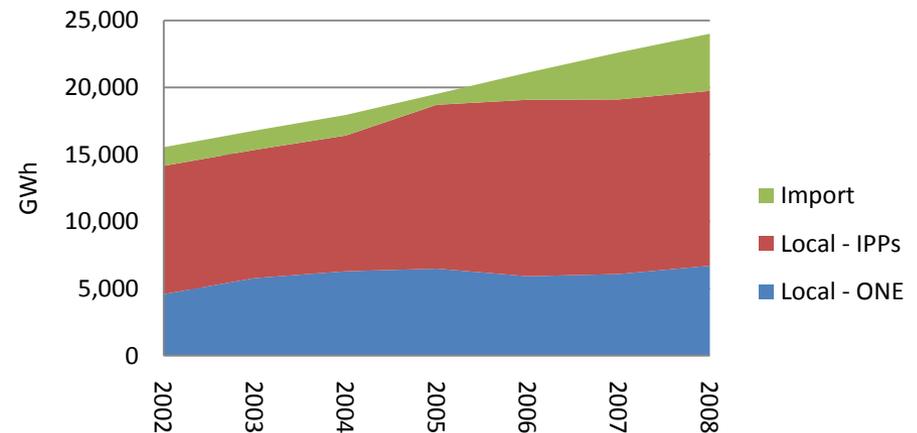
# Generation: Increasing Imports

- Domestic production has been relatively stable since 2005, after the commissioning of the Afouer pumping station (ONE) and the Tahaddart combined cycle (IPP)
- Imports grew from below 10% of total supply before 2006 to 18% in 2008
- The country highly depends on the IPPs and imports, with ONE accounting for only about 25% of total electricity supply
- The share of coal in domestic and total supply has been decreasing over the past few years, due to increasing gas and import supply. In 2008, coal still accounted for 58% of domestic supply and 47% of total supply
- The first quarter of 2009 showed exceptionally high hydropower generation (1,185 GWh vs. 310 GWh during the first three months of 2008), which led to a sharp decrease in imports (540 GWh vs. 885 GWh) and in thermal generation (4,030 GWh vs. 4,580 GWh)

Morocco - Power Supply by Fuel (source: ONE)



Morocco - Power Supply by Producer (source: ONE)



# Capacity: Few Recent New Plants

- At the end of 2009, total installed capacity will reach 6.2 GW
- ONE's capacity will be 4.4 GW:
  - 1.8 GW of hydro capacity, including the new Afouer pumping station (commissioned in 2004-2005)
  - 2.4 GW of fossil fuel fired capacity, including newly commissioned units in Mohammedia (300 MW, gas turbines), Tan Tan (116 MW, diesel) and Ain Beni Mathar (300 MW, first phase of the new hybrid CCGT-solar plant)
  - 0.2 GW of wind capacity, consisting mostly of the new Amougoul (60 MW, 2007) and Tanger (140 MW, 2009) farms
- The three IPPs account for 1.8 GW:
  - Jorf Lasfar Energy Company (JLEC), a 1,350 MW coal-fired plant that was commissioned between 1994 and 2000. It was bought from the original sponsors (ABB and CMS) by Taqa of Abu Dhabi in 2007. It holds a 30 year PPA with ONE, maturing in 2027
  - Energie Electrique de Tahaddart (EED), a 380 MW combined cycle gas-fired plant, commissioned in 2005. It is owned by ONE (48%), Endesa (32%) and Siemens (20%)
  - Compagnie Eolienne du Détroit (CED), a 50 MW wind farm, commissioned in 2001. It was developed by EDF, and bought by French independent operator Theolia in 2008

Moroccan Electric Capacity (2009)		MW
<b>ONE</b>		<b>4,402</b>
Hydro (turbines)	1,305	26 plants
Hydro (pumping)	464	Afourer
Coal	429	Mohammedia and Jérada
Fuel oil	600	Mohammedia and Kénitra
Diesel	185	
Gas turbines (open cycle)	915	6x20 MW + 15x33 MW + 3x100 MW
Gas turbines (combined cycle)	300	Ain Beni Mathar, phase 1
Wind	204	Amougoul and Tanger
<b>IPPs</b>		<b>1,786</b>
Jorf Lasfar (JLEC)	1,356	Coal
Tahaddart (EED)	380	CCGT
CED	50	Wind
<b>Total</b>		<b>6,188</b>

# Generation Investment Plan: More Coal...

- Morocco's reserve margin is currently limited, as shown for instance by the high load factors of the baseload IPPs in the past few year (around 85% for both Jorf Lasfar and Tahaddart): new capacity is needed soon
- In fact, almost 900 MW are to be put on line in 2009: the new Mohammedia gas turbine, the first phase of the Ain Beni Mathar plant, the Tanger wind farm, the Tan Tan diesel capacity, and the Tanafnit El Borj hydro unit
- Beyond 2009, ONE's most recent (pre-crisis) investment plan includes the following fossil fuel fired projects, both for the utility's own capacity and for future IPPs:
  - In 2010, the Ain Beni Mathar plant should be fully operational (172 MW, in addition to the first 300 MW), as well as a new diesel group in Agadir (80 MW)
  - In 2011, three open cycle fuel oil-fired turbines should come on line in Kénitra (300 MW). They will complement the Mohammedia gas turbines commissioned in 2009 as part of an emergency initiative to ensure supply reliability
  - An extension of the Jorf Lasfar plant is expected to be commissioned in 2012 or 2013 (units 5-6, 700 MW). It will provide much needed baseload capacity to the country
  - After 2013, the main project for the country would be a new coal-fired IPP in Safi in 2014 (2x660 MW). From 2015 on, several options are open, including a third unit in Safi or, in case more natural gas becomes available, additional gas-fired capacity (including conversion of open cycle turbines into combined cycle, which would be very cost efficient and would limit CO2 emissions)

# Generation Investment Plan: ...And More Renewable

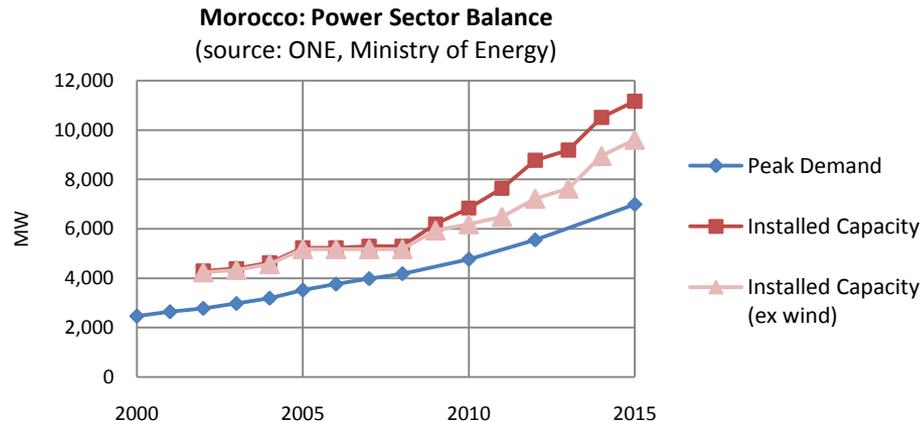
- Morocco also has an ambitious wind energy program, with as much as 1.3 GW to come on line in the next 3 years. That would include:
  - 300 MW at the Tarfaya wind farm (2010-2011 or 2011-2012)
  - 1,000 MW or more through the EnergiPro program (renewable self generation by industrial users)
- The government recently issued a long term plan to develop concentrated solar power (CSP):
  - Creation of the Moroccan Agency for solar Energy
  - USD 9bn to be invested
  - 2,000 MW to be commissioned between 2015 and 2020 in 5 sites: Ouarzazate (500 MW), Ain Beni Mathar (400 MW), Fom Al Oued (500 MW), Boujdour (100 MW), Sebkhath Tah (500 MW)
  - 3 projects proposed in the MENA CSP Scale-Up program, a World Bank/AfDB sponsored initiative to develop 1,000 MW of CSP in the MENA region, with concessional finance from Clean Technology Fund (CTF, up to USD 750m): Ouarzazate (100 MW), Ain Beni Mathar (125 MW), and a CSP-desalination project in Tan Tan (50 MW)

## Morocco: New Capacity (source: ONE)

MW	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>ONE</b>												
Hydro (turbines)	98						40			34		
Hydro (pumping)		233	231								412	
Coal												
Fuel oil, diesel, OCGT							416	80	300			
CCGT							300	172				
Wind					60		140					
<b>IPPs</b>												
Jorf Lasfar (coal)										700		
Safi (coal)												1,320
Tahaddart (CCGT)			380									
Wind								400	500	400		
<b>Total</b>	<b>98</b>	<b>233</b>	<b>611</b>		<b>60</b>		<b>896</b>	<b>652</b>	<b>800</b>	<b>1,134</b>	<b>412</b>	<b>1,320</b>

# Generation Investment Plan: Urgent Short Term Needs

- ONE's investment plan is based on a growth of around 8% per year for peak demand. This was probably optimistic even before the crisis, although residential peak demand is expected to grow rapidly, due to increasing purchasing power all over the country, and subsequent demand for electrical appliances (air conditioning, etc.). Slower economic growth and the good hydraulic conditions currently give Morocco some relief
- The Ain Beni Mathar plant, together with the smaller Agadir and Kénitra units will contribute to maintaining an acceptable reserve margin over the next 2-3 years
- Beyond that, significant new capacity will be needed rapidly: this is why the Jorf Lasfar 5-6 project, which was originally planned for later, is now seen as an urgent priority. As an extension to an existing plant, it will be relatively easy to develop, and it will give the country an additional 2-3 years of margin
- In the wind segment, beyond the Tarfaya project, which is well advanced, it remains to be seen how much of the smaller EnergiPro private projects will be developed, and how quickly
- Finally, the Safi plant could probably be postponed by at least a couple of years without threatening the system's reliability



# Total Investment Plan: USD 1.4 Billion per Year

- Cumulated investment in Morocco's power sector would amount to around MAD 80bn (USD 10bn) during the period 2009-2015:
  - MAD 34bn (USD 4.2bn) for ONE, approximately 1/3 generation, 1/3 transmission, 1/3 distribution
  - MAD 33bn (USD 4.1bn) for the IPPs
  - MAD 11bn (USD 1.4bn) for the EnergiPro wind projects

<b>2009-2015</b>	<b>MAD m</b>	<b>USD m</b>
<b>ONE</b>		
Generation	12,800	1,600
Transmission	10,150	1,269
Distribution	10,700	1,338
<b>Total ONE</b>	<b>33,650</b>	<b>4,206</b>
<b>IPPs</b>		
Jorf Lasfar 5-6	8,000	1,000
Safi 1-2	20,000	2,500
Tarfaya	5,100	638
<b>Total IPPs</b>	<b>33,100</b>	<b>4,138</b>
<b>EnergiPro</b>	<b>11,400</b>	<b>1,425</b>
<b>Total</b>	<b>78,150</b>	<b>9,769</b>

Source: ONE, Ministry of Energy, WB estimates

USD 1 = MAD 8

# ONE: Funding Available Despite Weak Finances

- The weak financial position of ONE (see appendix) is mostly due to the persisting mismatch between increasing fuel costs (direct or through PPAs) and regulated tariffs, together with substantial investment in rural electrification during the past decade, leading to structurally negative free cash flow, and increasing debt level. New required generation and other investment will lead to the doubling of total debt, from MAD 22bn in 2007 to MAD 47bn in 2012-13
- Despite financial difficulties, no funding gap is expected for ONE's projects in the next few years, thanks to donors financing:
  - The Islamic Development Bank should for instance finance 80% of the Kénitra power plant (EUR 150m loan)
  - The European Investment Bank would finance 50% of the Abdelmoumen hydro pumping station (EUR 150m loan). World Bank funding could also be required for this project (at the moment, due to the small number of candidates, the bidding process is being reconsidered, and a new request for proposal could be launched in the near future)
  - The World Bank is currently lending USD 150m for transmission & distribution investment
- ONE's equity was reinforced in 2008 (almost MAD 2bn), and again in 2009 (over MAD 2bn, including MAD 1.5bn from the Fonds de Développement Énergétique (FDE))
- In addition to external resources, ONE expects some recovery in internal cash flow generation, thanks to productivity measures and asset disposals (ONE plans sell more than half of its 48% in Tahaddart IPP, through an expected IPO)
- Local commercial banks and ECAs also remain available for ONE, although the banks' conditions are stricter (higher margins, enhanced sovereign guarantee package, etc.). More innovative, potentially less expensive solutions are being considered by ONE for short term financing (commercial paper, securitization, etc.)
- Beyond these measures and financings, the key to ONE's long term viability will be tariff adjustment. A World Bank financed tariff study will help ONE and the Moroccan government implement a sustainable tariff reform

# Coal fired IPPs: Jorf Lasfar Extension

- Units 5 and 6, capacity 2x350 MW, coal-fired, project cost around USD 1bn, 30 year PPA, commissioning expected in 2012-2013
- The leftover initial financing (ca. USD 300m) was completely repaid in early 2009 (leading to cancellation of an IBRD risk coverage). It was refinanced in local currency, with a 2026 maturity and a quite aggressive pricing (around 150bp)
- Taqa operates unit 1-4, and will also operate units 5-6. A RFP was launched together with ONE to select an EPC contractor, with an October 2009 deadline. The choice of the EPC contractor is expected by end 2009
- The contemplated financing would be less structured than for units 1-4, with Taqa corporate support if necessary (for instance as a bridge loan)
- Local banks could provide up to half of the funds, with ECAs covering or even funding most of the other half (which ECAs, and under what structure, will of course depend very much on the EPC contractor)
- An international commercial tranche could also be considered on a shorter term basis (it would be refinanced when market conditions improve), as well as loans from IFIs
- Local equity partners could joint Taqa in the project, but this remains unclear

# Coal fired IPPs: the Safi Project

- Capacity 2x660 MW, project cost USD 2.5-3.0bn, 30 year PPA, commissioning expected in 2014-2015, after multiple postponements that lead, among other things, to putting forward the Jorf Lasfar 5-6 project. Further postponement is not unlikely
- There is some discomfort among potential sponsors and banks about the project, due to the uncertainties regarding the site (it changed several times), the technology (could it be subcritical?), and the timing (multiple delays)
- However, several major international developers are interested in the project. 17 bidders were prequalified in September 2008. Next step - request for proposals - has been postponed to end 2009
- With major developers potentially involved in the project, equity financing (up to USD 500m) should not be an issue. As for Jorf Lasfar 5-6, local partners could take some equity (up to 20%?)
- The contemplated debt (USD 2.0-2.5bn) is too large for local banks only, especially if they participate in Tarfaya and Jorf Lasfar 5-6, after having participated in the Jorf Lasfar 1-4 refinancing. The domestic tranche could probably not go beyond a maximum of USD 0.5-1.0bn
- A combination of international banks, ECAs and IFIs will be needed:
  - It is expected that IFI loans and ECA coverage/funding could cover 75% of the debt
  - For the remaining 25% commercial tranche, a coverage or guarantee scheme might be necessary to attract enough banks. Major project finance banks do not necessarily need such instruments, especially if the sponsor is a leading developer, but attracting enough second tier banks in a club or a syndicated loan will be more difficult

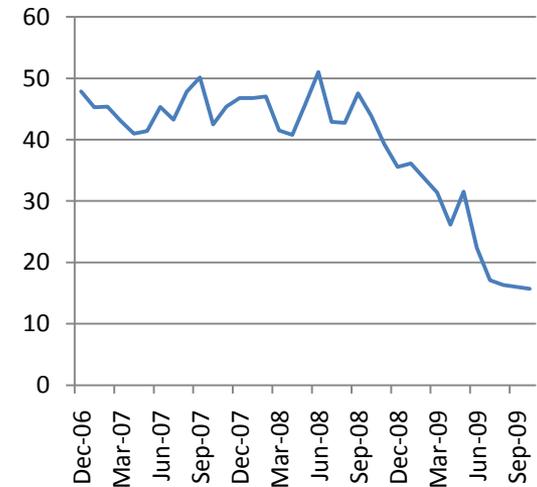
# Private Sector Wind Projects

- Tarfaya
  - Capacity 300 MW, project cost around USD 500m, 20 year PPA, commissioning expected in 2011-2012
  - Two finalist bidders: International Power with Nareva, and GDF Suez. The winner is expected to be chosen before end 2009
  - Financing is expected mostly from local banks in local currency, with maturity slightly shorter than the PPA (15-18 years), and margin below 150bp
  - Additional funds will be provided by IFIs, and possibly by ECAs (or with ECA coverage)
  - International banks showed interest before the crisis, but this interest seems to have vanished. No financing problem is expected, though, thanks to the relatively small size of the project, the local banks' appetite and the commitment from IFIs. An international tranche is not excluded, as both finalists are major clients of project finance banks
- EnergiPro
  - Program launched in 2006, to favor renewable self generation by industrial users
  - Favorable transmission tariffs are offered if power plant and consuming site are in different locations
  - Several projects are under development, especially by Nareva (ONA group) for a number of large clients (ONCF, ONDA, Samir, Lafarge, etc.), although the profitability model of EnergiPro projects remains to be refined (production cost, potential for export to Spain, potential for carbon finance, etc.)
  - Financing by local banks should not be a major issue, as potential sponsors are highly regarded corporates and major public enterprises

# Local Banks: Abundant Liquidity

- The Moroccan banking sector is well developed. The three leading banks are local (Attijariwafa, BCP, BMCE). There are also a number of medium size banks with foreign shareholding (BMCI, SGMB, Crédit du Maroc)
- The banking system has structural excess liquidity, although it has been decreasing markedly since the last quarter of 2008. This lead Bank Al Maghrib to decrease the mandatory reserve rate to ease cash constraints on the banks, from 12% in January 2009 to 10% in July 2009
- The electricity sector is seen as a good risk by the local banks (steady growth, quasi sovereign risk, even for IPPs): they are able and willing to participate in upcoming financings
- Long maturities, beyond 12 years, are still easily available on the local market
- There is limited availability of foreign currency on the local market, which makes foreign currency financing difficult for Moroccan banks, especially for longer maturities (limited amounts and maturities for foreign exchange transactions). The long term (15-18 years) foreign currency loans that would be needed to finance part of the upcoming IPPs are in effect not available in the Moroccan market: this is where international banks, ECAs and IFIs will be most needed
- Another limitation is risk concentration. Given the size of power projects, and the relatively limited capital base of Moroccan banks, concentration ceilings can be reached quite rapidly: no single borrower should represent more than 20% a bank's net worth. The banking sector's total net worth (including subordinated debt) totaled MAD 90bn as of May 31, 2009: the maximum theoretical amount it could lend to a single borrower is therefore around MAD 15bn (USD 2bn). This assumes all banks would participate, which is unlikely: the practical maximum lending amount is probably closer to half or a quarter of this, i.e. the equivalent of USD 500m to 1bn. The central bank is currently being lobbied to ease its risk concentration rules; it is unclear whether these rules will be eased

**Moroccan Banks**  
**Structural Liquidity Position**  
 (MAD bn, source: Bank Al Maghrib)



# Other In-Country Financing Sources

- Institutional investors (insurance companies) would be willing to invest in power projects (private placement of long term debt, probably with some sort of recourse on the project sponsors)
- The newly created Fonds de Développement Energétique (FDE), totaling USD 1bn, with funds from Saudi Arabia (USD 500m), the UAE (USD 300m) and Morocco's Hassan II Fund (USD 200m), will participate in financing the power sector:
  - Part of it will be used for low profitability activities, such as rehabilitation of ONE's older power plants,
  - Most of it will be channeled through the newly created Société pour l'Investissement dans l'Energie (SIE), which will take for-profit equity stakes in power projects, both renewable and conventional

# Conclusion and Recommendations

# The Pipeline of Projects is Unchanged

- Due to the crisis and the favorable hydrologic situation in the agriculture, power demand growth has slowed down in Morocco
- However, medium to long term prospects have not changed, as the fundamentals of the economy remain solid, and the governments' response to the crisis, based on well-managed public finances, has been well targeted
- The electricity supply-demand situation is tight in Morocco: new capacity is needed within a short timeframe
- No project has been cancelled, but some have experienced delays, only partly due to the crisis (this is especially the case for the Safi coal fired plant, where uncertainties remain regarding some parameters of the project). Those are relatively normal delays in project development. They are not critical and, in a way, can even be considered beneficial - provided they remain reasonable: financial terms and conditions are currently difficult and, since power demand has slowed down, it is possible and perhaps better to wait a few months to look for funds (in addition, EPC costs are also following a slowly decreasing trend)

# Funds Remain Available, But At Much Higher Cost

- Morocco relies on a balanced mix of public and private sector power generators
- Public sector projects are typically financed through International Financial Institutions (IFIs), bilateral donors, Export Credit Agencies (ECAs) and local banks. No major financing problem is expected for such projects. In spite of the crisis, and financial issues with ONE, IFIs, donors and ECAs are still willing to finance. Local banks remain highly liquid and consider the power sector a good risk: they are also willing - and able - to participate in financing power projects
- Private projects, which rely more on international banks, can face a more difficult financing situation. Banks reduced their general appetite for lending, and reassessed their position towards risk, especially in emerging countries. However, major project finance banks insist they are still fully active in all markets, and that Morocco is an attractive one. In spite of a still paralyzed syndication market, sector players are generally confident that the “good” projects will be financed, thanks, if need be, to alternative sources: mostly local banks, as local liquidity is abundant, and also international public or quasi-public players (ECAs, IFIs, donors)
- While most projects remain bankable in spite of the crisis, the key issue is the overall cost of finance, regardless of sources, and of the public/private nature of the projects
- The high “cost” of finance includes higher margins, but also shorter tenors, higher fees, stricter covenants, etc. This is mostly true for international commercial lenders, although it also applies, to some extent, to public sector entities (IFIs, ECAs)

# Recommendations

- The general impact of the financial crisis on well rated, well integrated, middle income countries like Morocco is moderate. The budget situation remains under control, with some flexibility for the future
- New investment in the power sector, which is much needed as capacity margins are tightening, is not at risk, as a variety of local and international funds is available
- The main issues are delays in structuring projects and harsher terms of conditions for loans
- In this context, direct financial support from the World Bank and other multilateral institutions could be needed as follows:
  - They can provide funds, as part of the solution to temporarily replace international commercial banks, together with local banks and ECAs. Even when other funds are available, they can blend their long term, reasonably priced, resources with less competitive funds (higher margins and/or shorter tenors and/or local currency only), in order to keep cost of financing more acceptable to the countries
  - Another way of helping projects to reach prompt financial closing, by attracting more commercial banks at more reasonable conditions, would be to provide adequate security offerings, such as the IBRD Partial Risk Guarantee. This could be especially useful in the case of the Safi project, where multiple changes in location, technology, etc., created additional caution among banks and developers. World Bank Group assistance in this projects could also help the Moroccan government to better define the project in the most environmentally friendly way
  - Due to high capital costs and regulatory issues, World Bank assistance may also be needed in the renewable energy sector, mostly wind and CSP, including through the MENA Scale Up solar initiative
- Technical and policy assistance will also continue: consolidation of the ongoing energy sector reform is necessary. Measures to promote efficient and low cost electricity, and sustainable tariffs, are essential to improving competitiveness and attracting investment in the country. To a large extent, these issues are covered by the current Energy DPL 1 and the upcoming Energy DPL 2. Measures include tariffs reform, restructuring contractual arrangements between generators and distributors, and general regulation of the energy sector

# Appendix: ONE's Financial Statements

# ONE

In MAD million							
P&L	2002	2003	2004	2005	2006	2007	2008
Sales	11,143	12,107	12,150	14,081	15,073	16,500	18,461
<i>growth</i>	7%	9%	0%	16%	7%	9%	12%
Cost of sales	-9,714	-8,747	-9,068	-11,498	-12,471	-13,027	-18,671
EBITDA	1,429	3,360	3,082	2,583	2,602	3,473	-211
<i>%sales</i>	13%	28%	25%	18%	17%	21%	-1%
EBIT	-1,705	368	309	-464	-557	295	-3,650
<i>%sales</i>	-15%	3%	3%	-3%	-4%	2%	-20%
PBT	-2,235	-166	-209	-1,027	-1,055	-295	-4,344
Extraordinary	1,296	268	204	828	-630	161	-1,536
Income tax	-31	-33	-35	-42	-48	-49	-56
Net profit	-970	69	-39	-241	-1,733	-182	-5,936
Cash flow statement							
	2002	2003	2004	2005	2006	2007	2008
Cash flow from operations	1,800	1,768	4,179	2,192	832	1,345	1,652
Investment	-3,351	-3,441	-4,662	-7,130	-4,132	-5,513	-10,000
Free cash flow	-1,551	-1,673	-483	-4,938	-3,300	-4,168	-8,348
Asset disposals	98	135	88	2,956	80	58	55
New capital	0	0	0	0	0	342	1,611
Other items	341	505	710	753	-626	325	4
Change in net debt	1,112	1,033	-315	1,229	3,846	3,443	6,679
Balance sheet							
	2002	2003	2004	2005	2006	2007	2008
Net fixed assets	39,535	40,435	42,690	46,736	48,069	50,816	57,655
Net current assets	457	1,539	-127	-156	236	1,755	-840
Net worth	18,655	18,929	17,846	19,893	17,952	17,604	13,773
Long term liabilities	8,537	9,212	11,199	11,940	11,760	12,932	14,349
Long term debt	12,365	12,660	13,717	14,746	16,208	19,593	25,930
Short term debt	434	1,173	-199	0	2,385	2,443	2,762
Net financial debt (NFD)	12,800	13,833	13,517	14,747	18,593	22,036	28,692
<i>NFD/Net worth</i>	69%	73%	76%	74%	104%	125%	208%
<i>NFD/EBITDA</i>	9.0	4.1	4.4	5.7	7.1	6.3	ns