

Iran Post Sanctions: How Much Oil will Hit the Market?

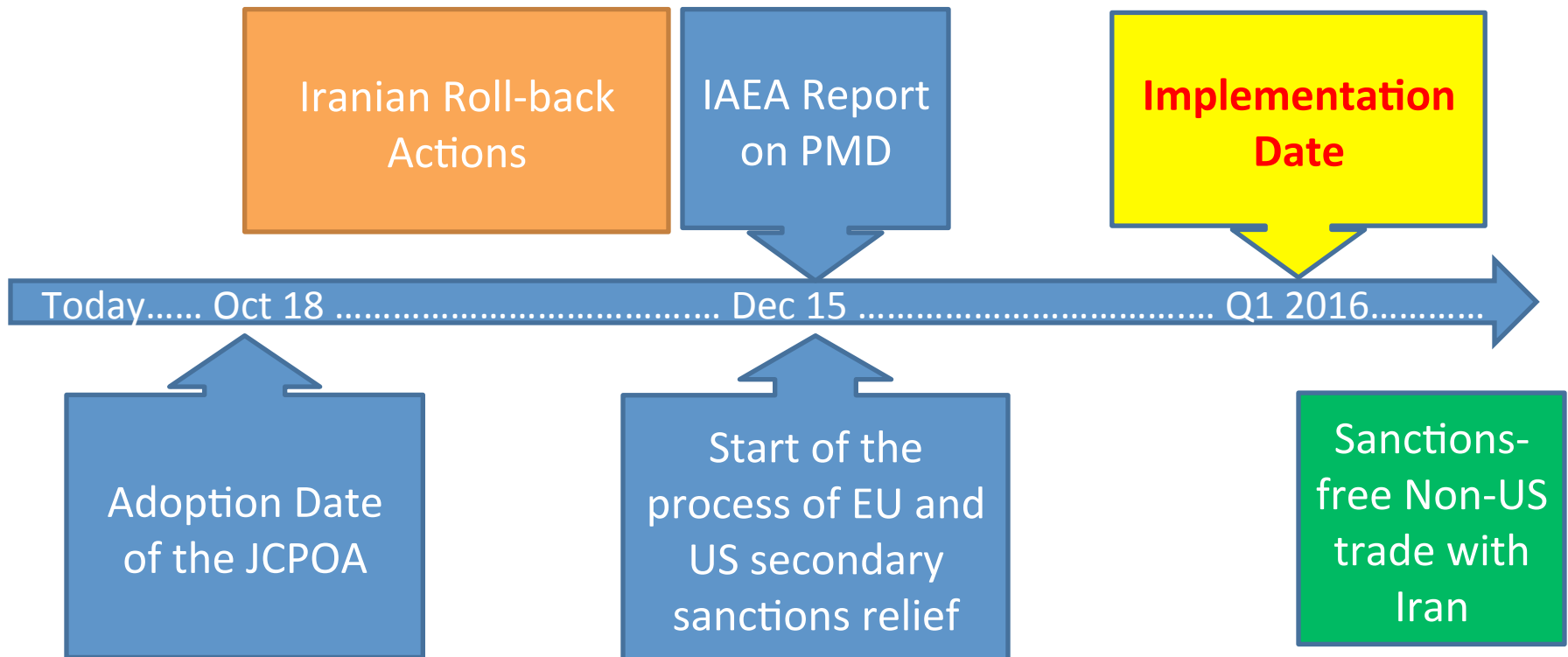
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INTRODUCTION

- Iran and the P5+1 have agreed on a framework to put an end to the dispute over Iran's nuclear program;
- Once the so-called Joint Comprehensive Plan of Action (JCPOA) is implemented, key sanctions will be removed and Iran will increase its crude oil production and exports;
- The increase in Iranian exports will emerge in stages and also parallel to major IOCs re-engaging the Iranian market;
- In this presentation I will look at:
 - Timeline of sanctions relief;
 - Developments in the Iranian petroleum sector;
 - The impact of sanctions relief on Iranian production in oil, gas, petroleum products and petrochemicals;
 - Iranian vision in the petroleum sector;
 - Impact on global markets;

TIME LINE FOR SANCTIONS RELIEF



SNAPSHOT OF THE ECONOMY

Indicators	1393 <i>(ended 20 March 2015)</i>	1394* <i>(ends 20 March 2016)</i>	1395* <i>(ends 20 March 2017)</i>
GDP growth (real in Rial)	3.0%	3.8%	4.5%
GDP (nominal in US\$ at median exchange rate)	\$329.5 bn	\$368.7 bn	\$427.5 bn
GDP PPP (in 2013 US\$)	987.1 bn	960.0 bn	-
GDP PPP per capita (in 2013 US\$)	\$12,644	\$12,133	-
Inflation Official (Unofficial)	15.6% (25.7%)	16.5% (21.9%)	17.6% (22.3%)
Oil and gas exports	\$55.3 bn	\$56.0 bn	\$78.1 bn
Non-petroleum exports (including services)	\$31.2 bn	\$33.8 bn	\$45.9 bn
Imports	\$65.1 bn	\$64.8 bn	\$73.2 bn
Trade Surplus	\$21.4 bn	\$25.0 bn	\$41.0 bn
Unemployment Official (Unofficial)	10.6% (17.5%)	10.1% (16.7%)	9.7% (15.9%)
Capital account deficit (in US\$)	-1.7 bn	-1.0 bn	-0.9 bn

Main source: *Iran Economics Magazine*, August 2015 (*Eqteasad-e Iran*), * Projected

IRAN'S PETROLEUM SECTOR

- In the past decade, Iran has gone from being a consumer of foreign technology and a pure exporter of oil to being:
 - An exporter of oil, gas and petroleum products;
 - A manufacturer of petroleum sector equipment and machinery; and
 - A hub for energy connectivity in the region;
- In the short run, the economic impact of this shift will be overshadowed by the negative phenomena such as sanctions;
- The intensive sanctions regime of the past few years created a lot of headaches, but it also gave Iran the opportunity to optimize the utilization of its resources and create domestic capacities;
- In fact, the growing potential of gas will transform Iran and one should start looking at Iran as an exporter of energy in various forms;
- The main potential will be in gas: By 2020 Iran will become the 5th largest gas market in the world after the US, the EU, Russia and China;
- The growing emphasis on value-add in the petroleum sector, hand in hand with the responses to external sanctions will gradually make the Iranian economy more diverse and less dependent on oil export revenues;

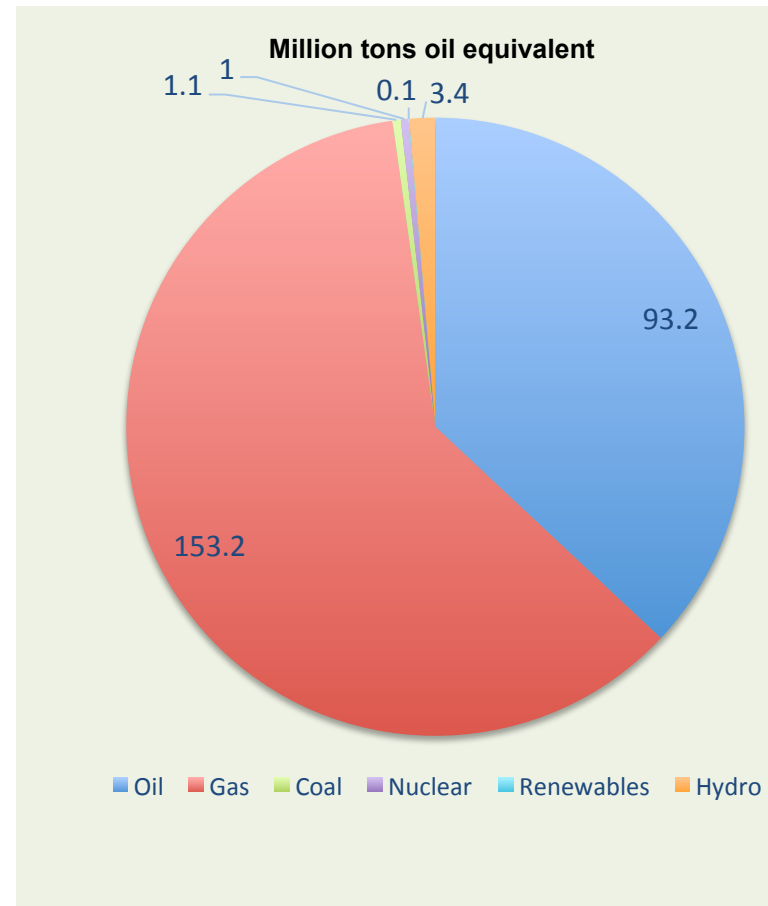
PETROLEUM SECTOR DEVELOPMENTS

Oil	
Reserves	157.8 billion barrels
Production	3.57 million bpd
Crude Oil Exports	1.21 million bpd
Crude Oil & Petroleum Products Exports	1.61 million bpd
Gas	
Reserves	34.0 trillion cubic meter (tcm)
Production	190.0 billion cubic meter / year (bcm/y)
Natural Gas Imports	5.32 bcm/y
Natural Gas Exports	9.31 bcm/y

- Iran intends to strongly return to oil markets to recapture its lost market share. According to Petroleum Minister Bijan Zanganeh, South Korea, Japan, India and Europeans have expressed interest to buy Iranian oil.
- Iran will also invest heavily in producing more gas which will empower the country to export more oil and also promote gas-based exports.

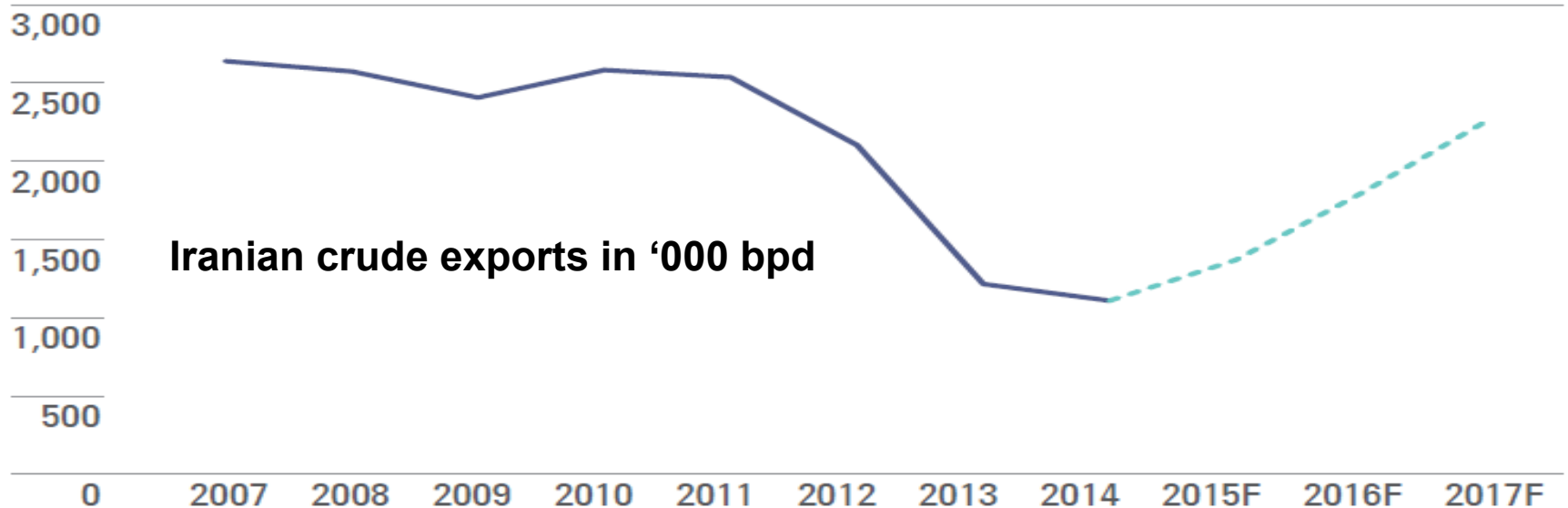
IRAN'S DOMESTIC ENERGY BASKET

- About 70% of Iran's domestic energy consumption is based on gas;
- With growing gas production and consumption, more crude oil will be freed for export;
- At the same time, Iran is expanding its domestic refining capacities to export more petroleum products;
- Subsidy reforms have also helped rationalize domestic energy consumption;



IRAN'S CRUDE EXPORTS

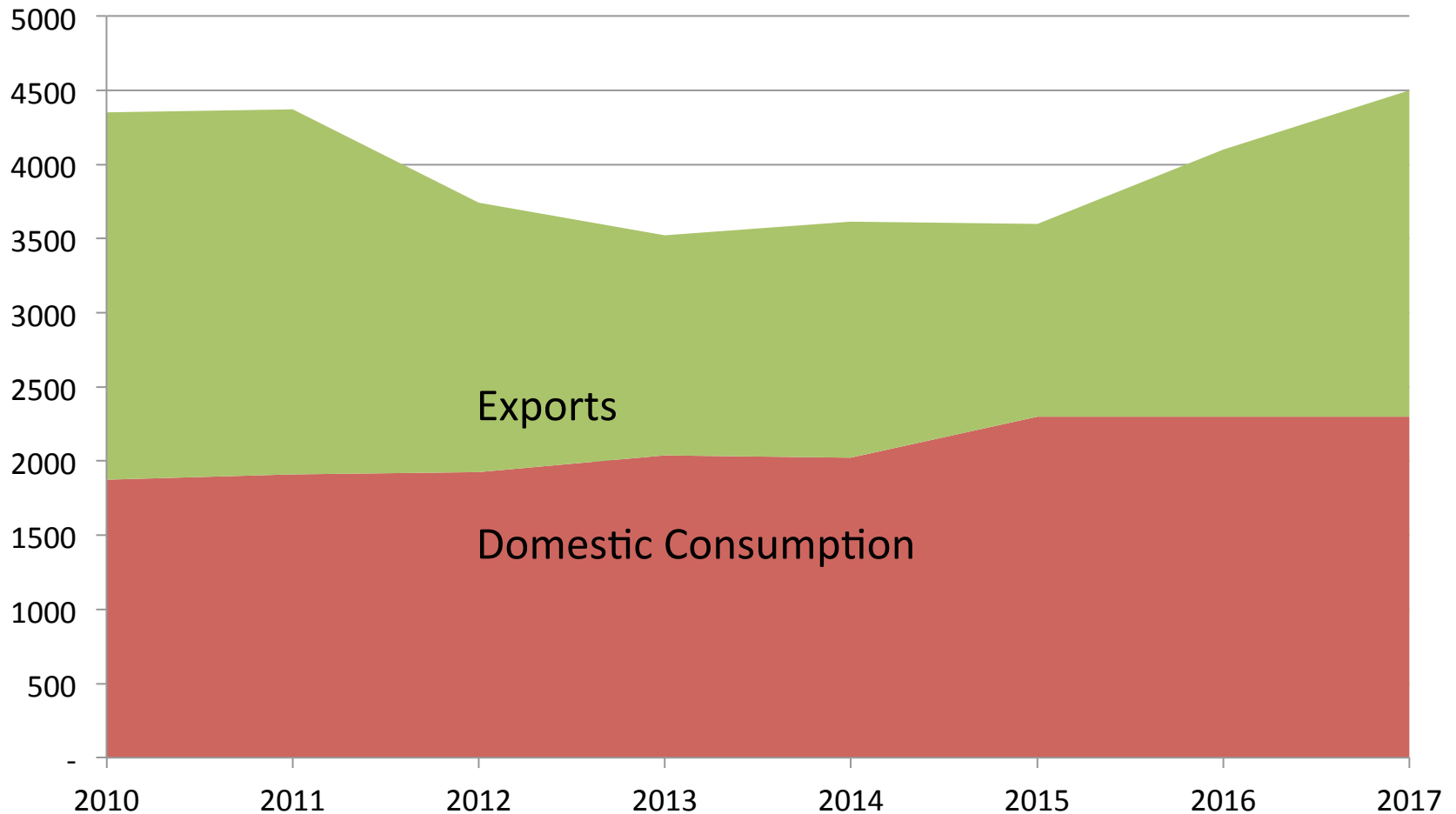
- Before the introduction of external sanctions on Iranian crude exports, Iran was producing 4 mbpd and exporting about 2.3 mbpd;
- As the following graph shows, the exports dropped to about 1 mbpd in 2014;
- Since last year, there has been some increase, but the major boost will come once sanctions are lifted;
- In 2016, Iran will be able to export 500,000 bpd more than in 2015 and by 2017, Iran will return to its old export levels.



IRAN'S OIL PRODUCTION

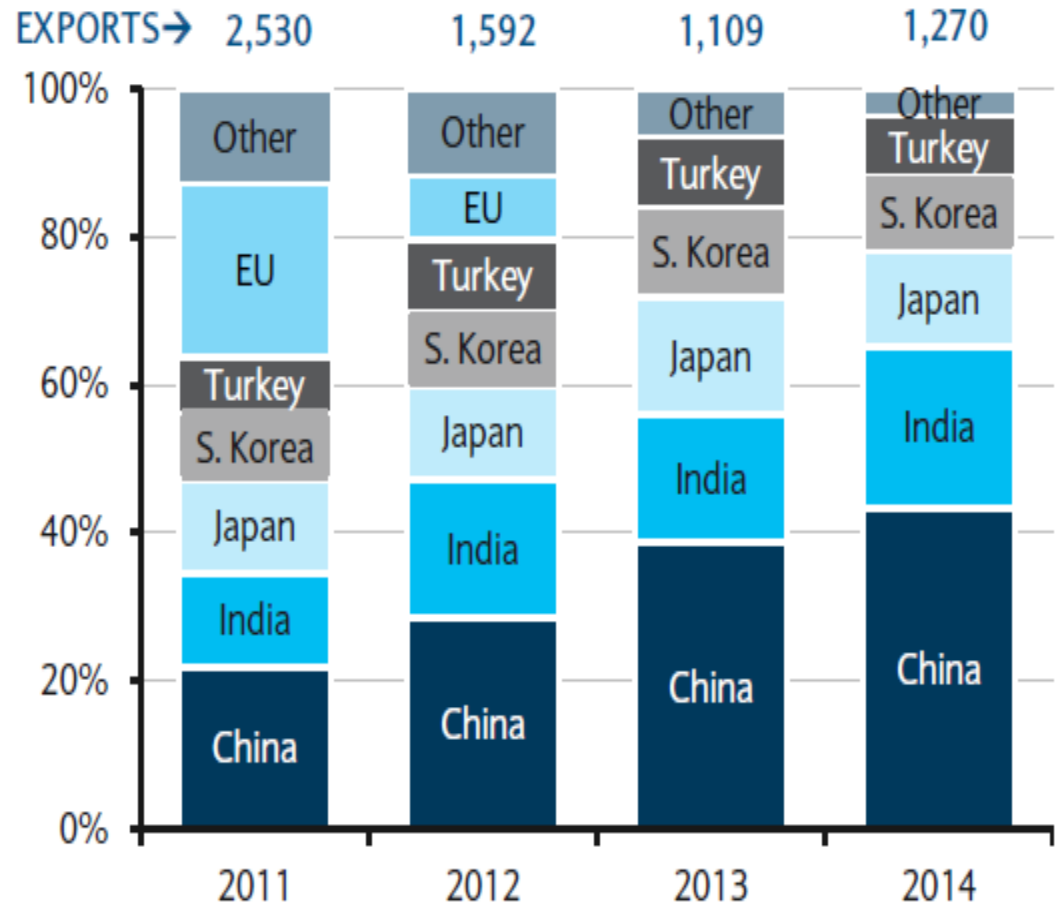


In '000 barrels per day



OIL MARKETING

- Around 80% of Iran's oil production includes two main streams, i.e.
 - Iran Heavy (29.5° API, 1.99% Sulphur) = 45% of production;
 - Iran Light (33.4° API, 1.36% Sulphur) = 35% of production;
- Both streams have potential for export and will find international customers;
- By reviving old EU, Japanese and South Korean customers, Iran will revive its old market share;



Source: IEA, Official customs data, MEES, Barclays Research

IMPACT ON OIL MARKETS

- The psychological impact of the Iranian nuclear deal has already been felt;
- Though a number of factors played a role (such as Chinese growth slowing, appreciation of the US\$ etc.), the Iranian nuclear deal also contributed to the price falling from about \$55 on 10 July 2015 to about \$42 in August;
- In January or February 2016 when increased Iranian exports will hit the market, global markets will also enter the winter season, so some of the potential downward price pressure would be balanced by seasonal adjustments;
- Furthermore, we can expect an OPEC decision in their December 2015 meeting which may translate into a reduction in production in some other states (especially Saudi Arabia);
- All in all, the planned increase in Iranian oil production won't shock the global markets as it may be compensated by other market developments;

GAS RESERVES AND PRODUCTION

Top 10 global gas producers (Bcm)

	Production	% of global
US	728	21%
Russia	579	17%
Qatar	177	5%
Iran	173	5%
Canada	162	5%
China	135	4%
Norway	109	3%
Saudi Arabia	108	3%
Algeria	83	2%
Indonesia	73	2%

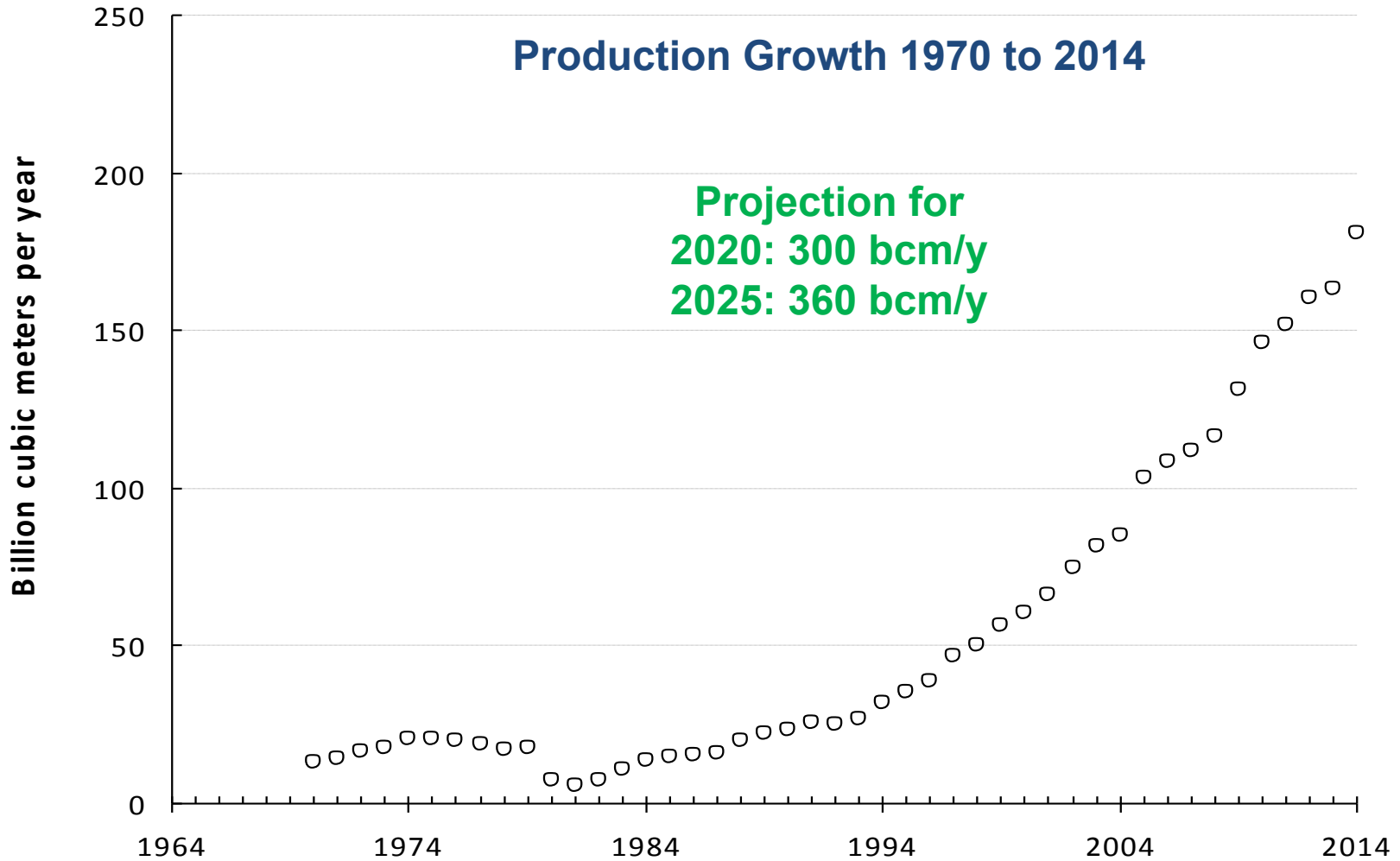
Source: BP Statistical Review 2015, Barclays Research

Top 10 proven gas reserves (Tcm)

	Proved Reserves	% of global proved reserves
Iran	34	18%
Russia	33	18%
Qatar	25	13%
Turkmenistan	18	10%
US	10	5%
Saudi Arabia	8	4%
UAE	6	3%
Venezuela	6	3%
Nigeria	5	3%
Algeria	5	3%

Source: BP Statistical Review 2015, Barclays Research

GAS PRODUCTION



GAS VISION 2025

- The Ministry of Petroleum has formulated the plans until 2025 as follows:
 - To remain the third largest gas producer in the world with gas production of 360 bcm/y by 2025
 - To Inject gas into the oil fields in order to maintain and increase oil production
 - To Supply Gas to Power Stations, Gas Based industries and Petrochemicals and to export the value added products at economically viable prices
 - To Replace domestic demand for petroleum products with gas and maintain the share of **gas in Iran's energy basket above 70 percent.**
 - To **Export Gas to the regional countries, Indian subcontinent and Europe**
- This vision requires capital investment of around \$160 billion from local and international sources;
- Key issues in addition to the need for investments:
 - Energy efficiency;
 - Removal of energy subsidies;
 - Long term gas pricing (still very politicized);

CONCLUSIONS

- The emerging lifting of sanctions on Iran will unleash a major potential for oil and gas production in 2016 and beyond;
- However, as the additional production will be phased, it won't lead to a price collapse, especially as OPEC action will also be expected;
- Iran plans to be a major producer of oil, gas and petrochemical products by 2020. It has made the strategic decision to add more value to oil and gas inside the country and will heavily invest in upstream and downstream activities;
- By 2020, oil production is planned to stand at 6 mbpd and gas production at 1,000 cmc/d (360 bcm/y);
- The value of energy projects up to 2020 is estimated to be around \$185 billion. Investments in upstream projects alone will amount to \$100 billion.
- Key challenge will be financing and Iran will be looking for creative financing solutions.
- Foreign companies will play a significant part in this process, but they will have to wait for the lifting of the current sanctions which could be removed, if there is a comprehensive agreement in the current nuclear negotiations;