World Economy and Energy

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THE SHIPBUILDERS' ASSOCIATION OF JAPAN

1. World Economy

The Shipbuilders' Association of Japan

1-1. Japan's Economy (1)

3 Key Principles called "Three Arrows"

Bold Monetary Policy

Flexible Fiscal Policy

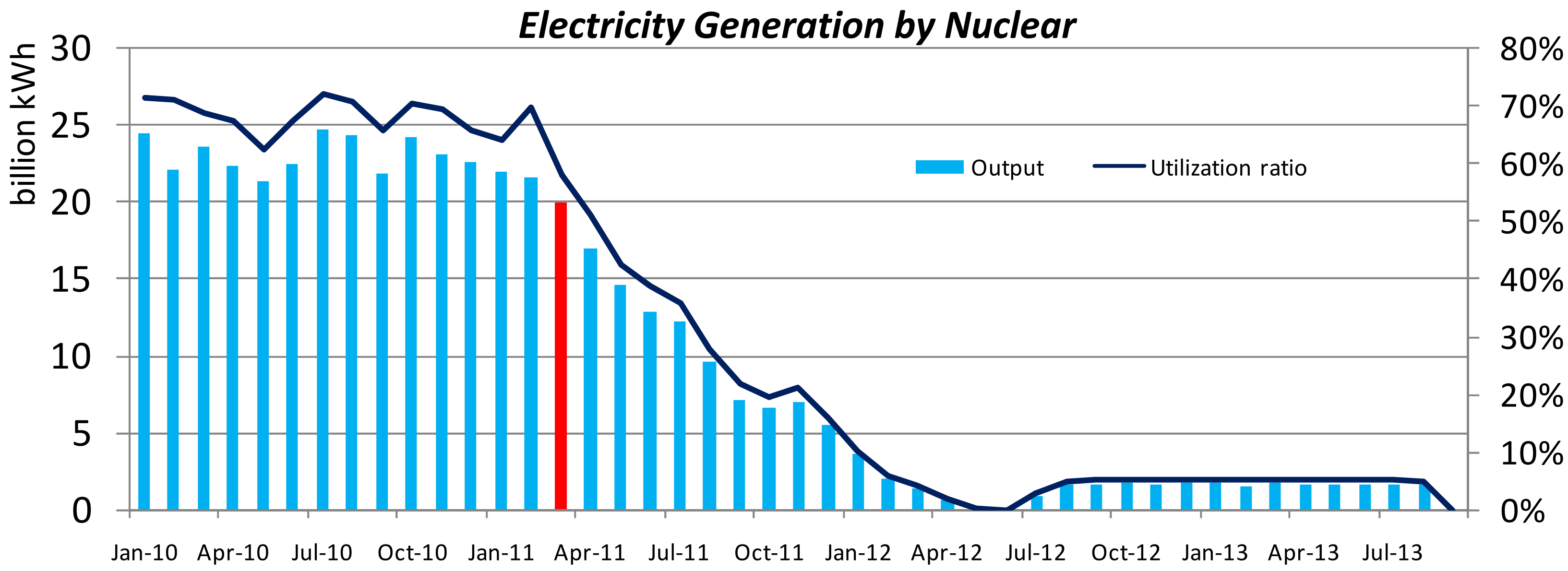
Abenomics

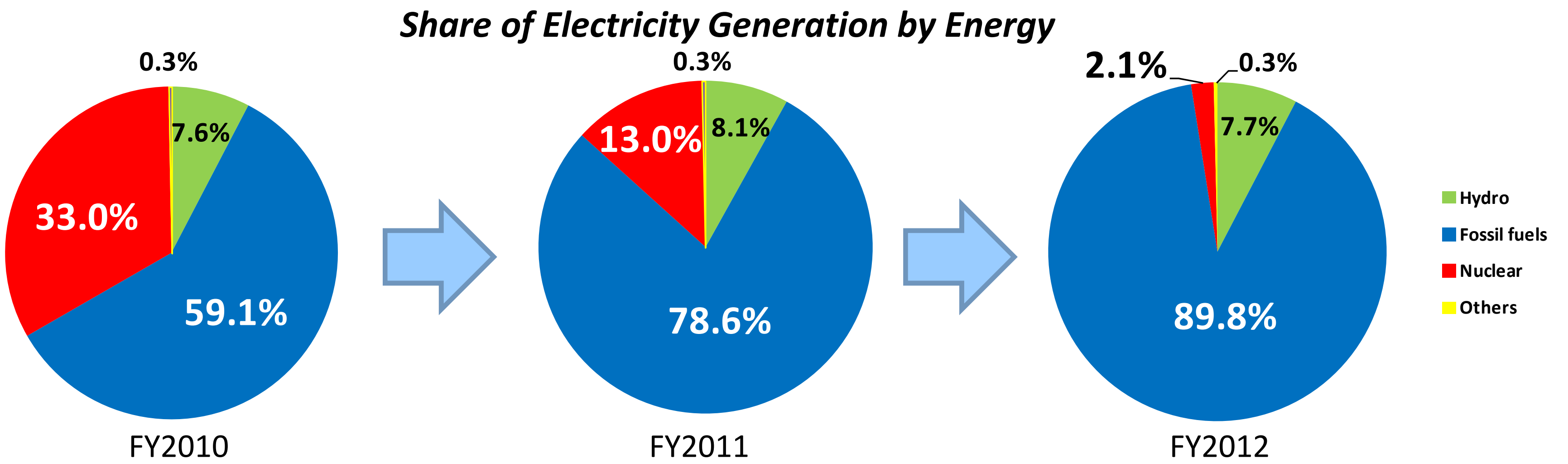
Growth Strategy

… and the fourth arrow newly appeared…

Tokyo 2020 Olympic Games

1-2. Japan's Economy (2)



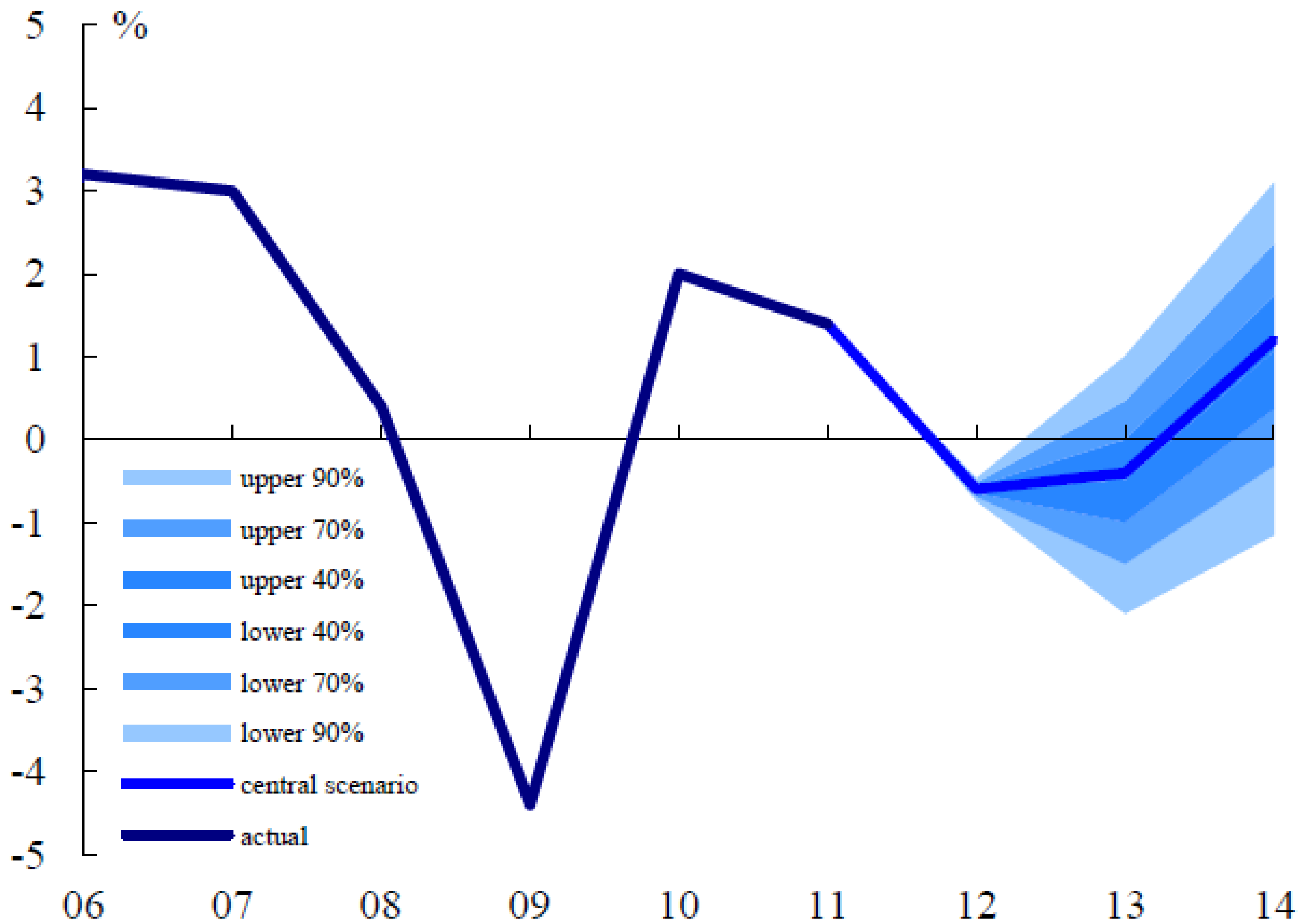


Source: The Federation of Electric Power Companies of Japan

1-3. Europe's Economy

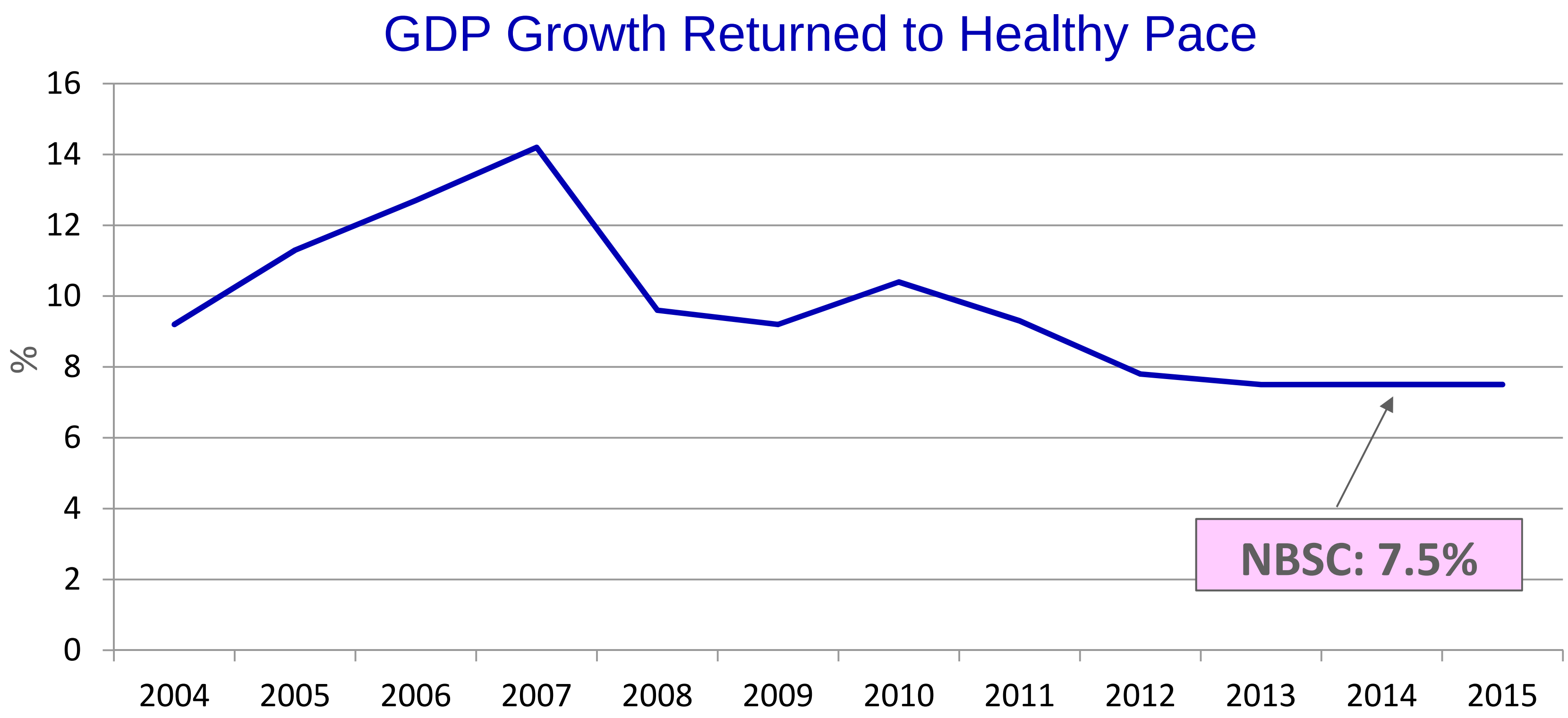
Spring Forecast European Commission/3

Graph I.21: **Euro area GDP forecasts - Uncertainty linked to the balance of risks**



Source: European Commission: http://ec.europa.eu/economy_finance/eu/forecasts/2013_spring_forecast_en.htm, presented by SEA Europe at JECKU EPM

1-4. China's Economy

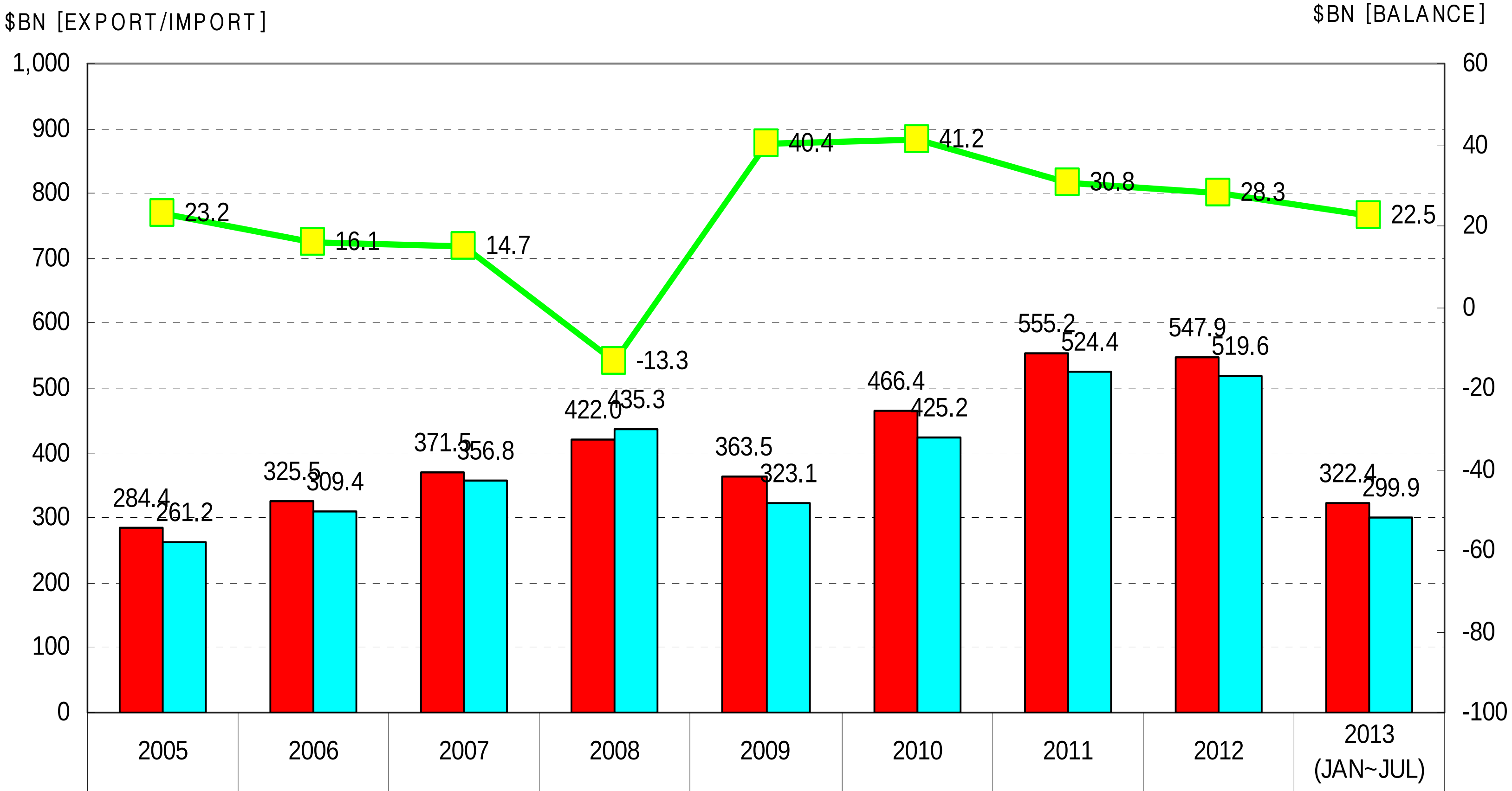


- The China's GDP growth rate decreased from 14.2% in 2007 to 7.8% in 2012. And it is 7.6% in the first half of 2013.
- The GDP will keep growing. According to the official forecasts, the average speed of growth will be 7.5% during the 12th Five-Year Plan. In 11th five-year plan, the growth rate of China is 7.5%, but actually is 11.2%.

Source: National Bureau of Statistics of China, presented by CSIC at JECKU EPM

1-5. Korea's Economy

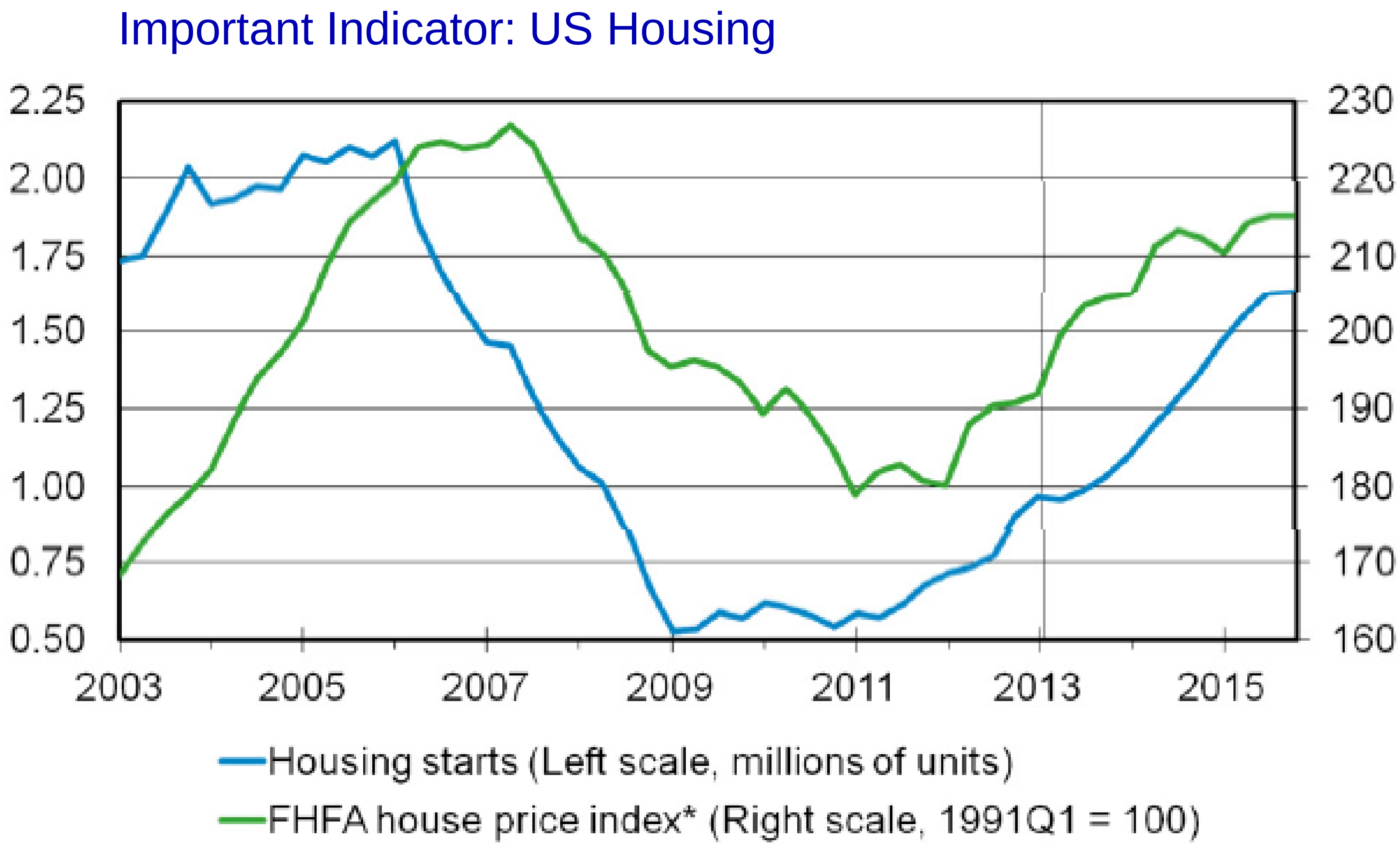
Foreign Trade Balance



	2005	2006	2007	2008	2009	2010	2011	2012	2013 (JAN~JUL)
EXPORT	284.4	325.5	371.5	422.0	363.5	466.4	555.2	547.9	322.4
IMPORT	261.2	309.4	356.8	435.3	323.1	425.2	524.4	519.6	299.9
BALANCE	23.2	16.1	14.7	-13.3	40.4	41.2	30.8	28.3	22.5

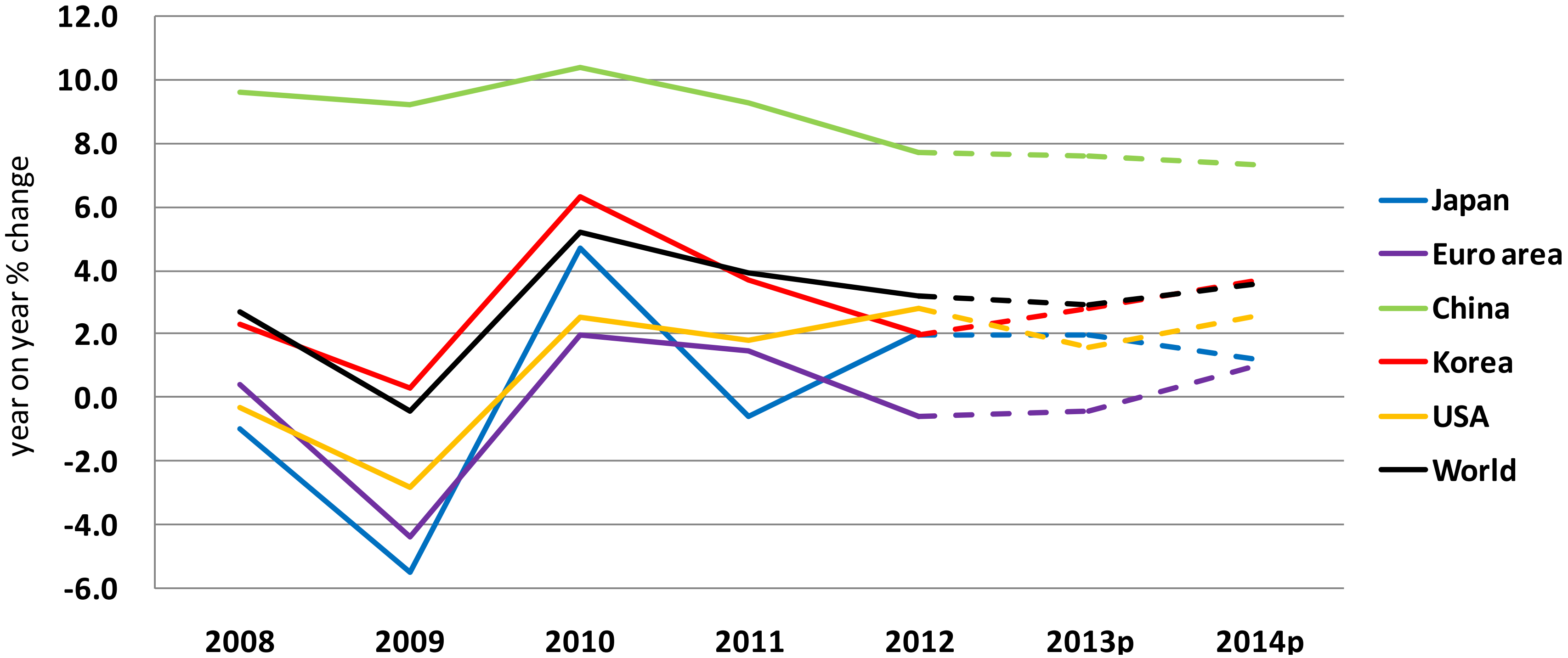
Source: Korea International Trade Association, presented by KOSHIPA at JECKU EPM

1-6. US Economy



Presented by General Dynamics NASSCO at JECKU EPM

1-7. World Economy – Real GDP Growth

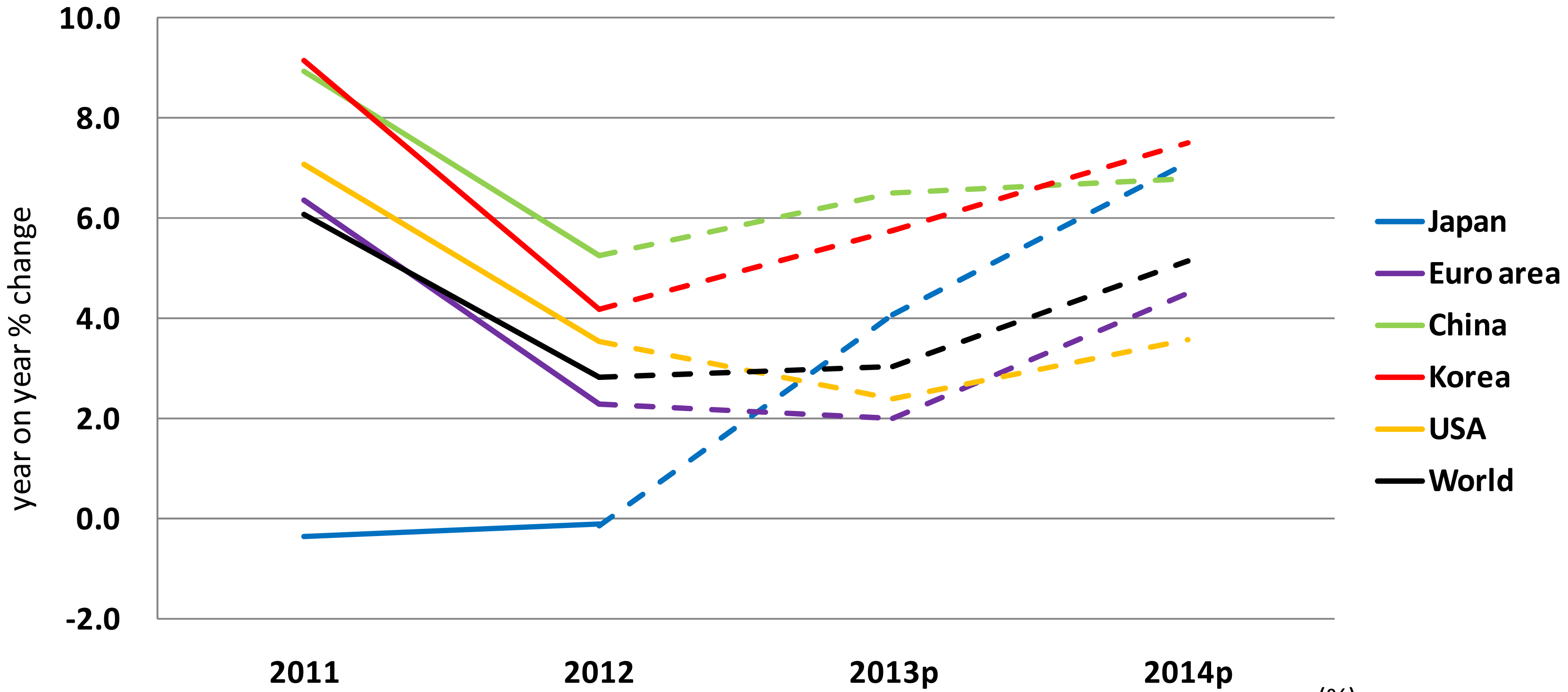


(%)

	2008	2009	2010	2011	2012	2013p	2014p
Japan	-1.0	-5.5	4.7	-0.6	2.0	2.0	1.2
Euro area	0.4	-4.4	2.0	1.5	-0.6	-0.4	1.0
China	9.6	9.2	10.4	9.3	7.7	7.6	7.3
Korea	2.3	0.3	6.3	3.7	2.0	2.8	3.7
USA	-0.3	-2.8	2.5	1.8	2.8	1.6	2.6
World	*2.8*	*-0.6*	*5.2*	*3.9*	*3.1*	*2.9*	*3.6*

Source: IMF "World Economic Outlook" database October 2013

1-8. World Economy – Export Growth

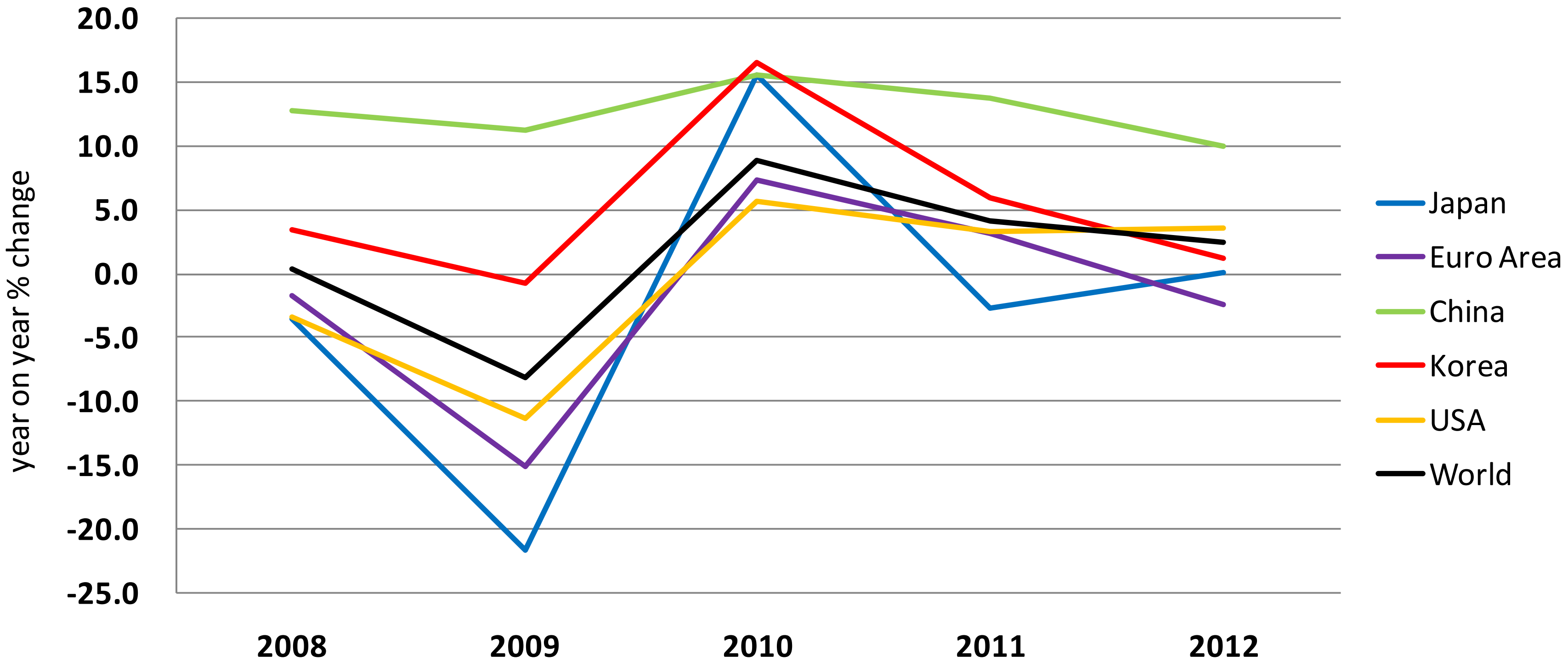


(%)

	2008	2009	2010	2011	2012	2013p	2014p
Japan	1.4	-24.2	24.4	-0.4	-0.1	4.1	7.1
Euro area	0.6	-12.7	11.6	6.3	2.3	2.0	4.5
China	8.4	-10.3	27.8	8.9	5.2	6.5	6.8
Korea	6.6	-1.2	14.7	9.1	4.2	5.7	7.5
USA	5.7	-9.1	11.5	7.1	3.5	2.4	3.6
World	*2.7*	*-10.4*	*12.9*	*6.1*	*2.8*	*3.0*	*5.1*

Source: IMF "World Economic Outlook" database October 2013

1-9. World Economy – Industrial Production Growth

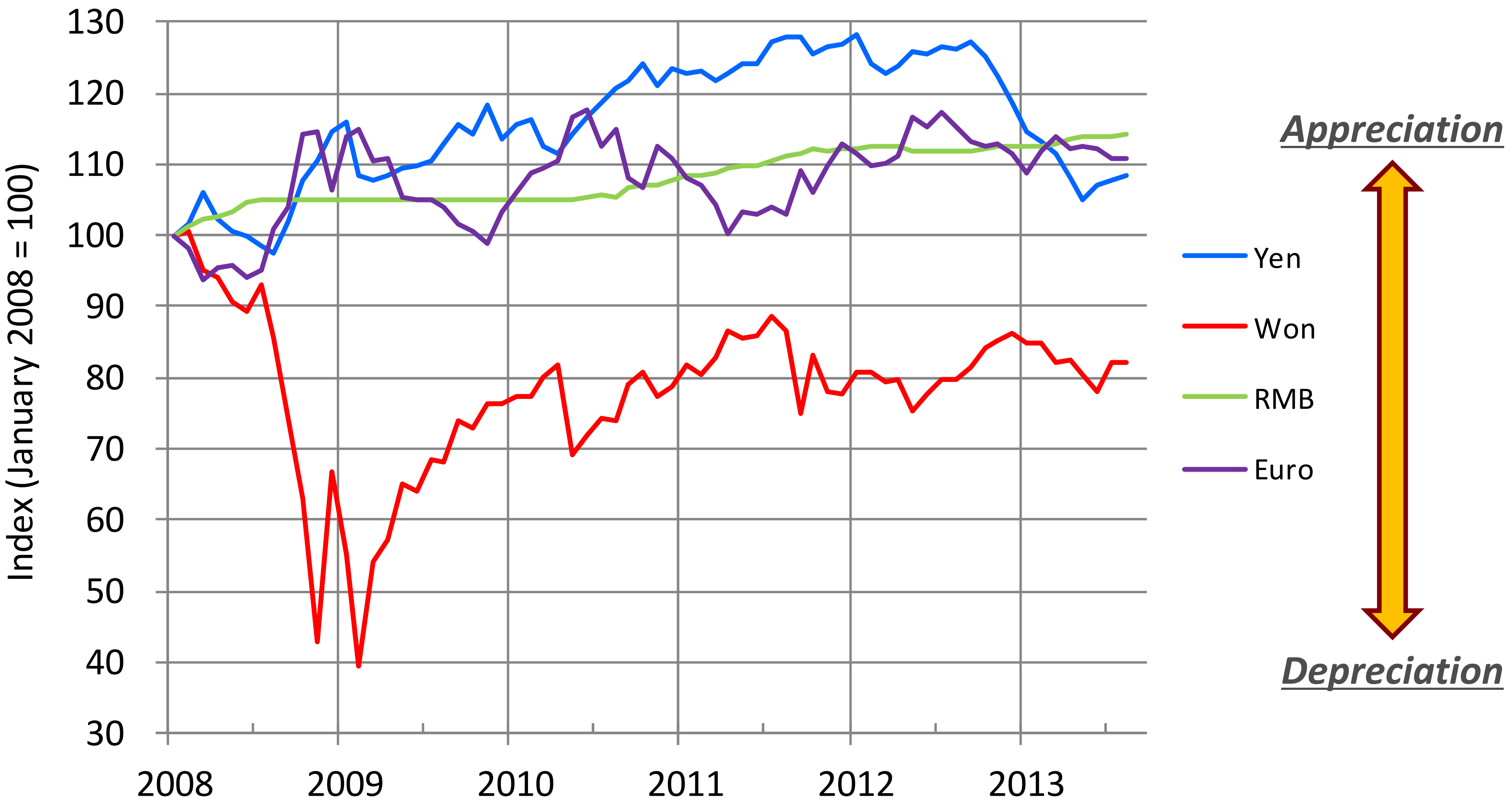


(%)

	2008	2009	2010	2011	2012
Japan	-3.5	-21.6	15.6	-2.6	0.2
Euro area*	-1.8	-15.1	7.3	3.1	-2.4
China	12.7	11.2	15.5	13.7	10.0
Korea	3.4	-0.7	16.5	5.9	1.2
USA	-3.4	-11.3	5.7	3.4	3.6
World	*0.4*	*-8.1*	*8.9*	*4.2*	*2.5*

Source: World Bank “Global Economic Monitor”, *Eurostat

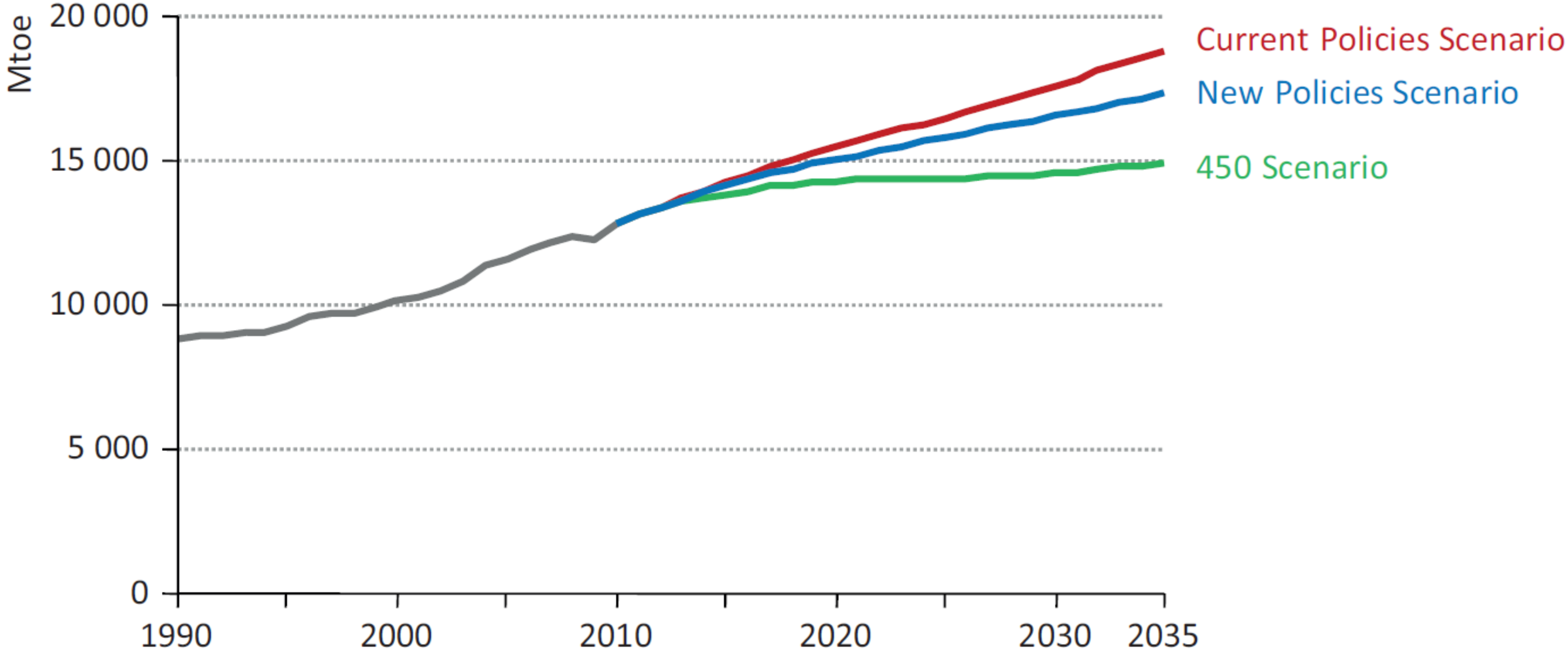
1-10. World Economy – Exchange Rate per US Dollar



Source: IMF

2. World Energy

2-1. World Primary Energy Demand by Scenario

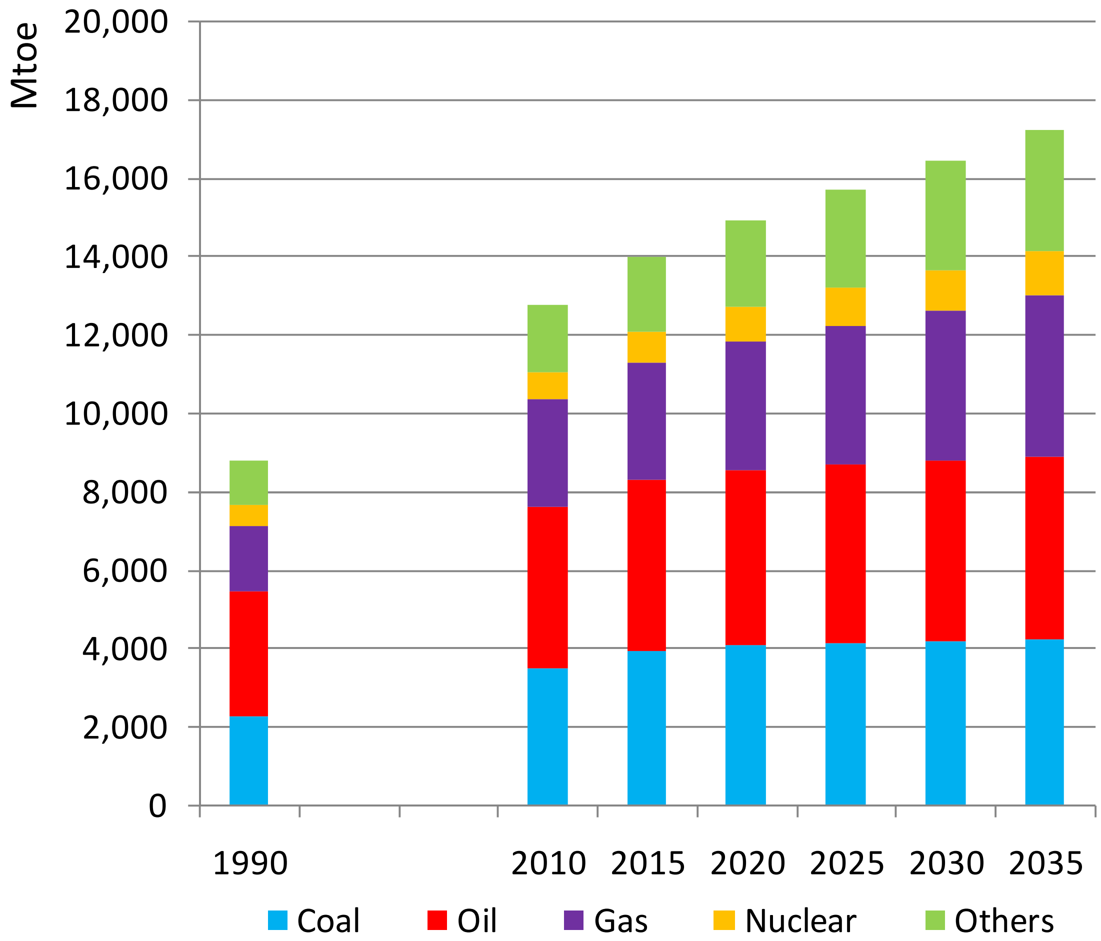


Scenario	Energy demand (Mtoe)				2010/35 CAGR
	2010	2020	2030	2035	
CPS	12,730	15,332	17,499	18,676	1.5%
NPS	12,730	14,922	16,417	17,197	1.2%
450S	12,730	14,176	14,453	14,793	0.6%

Main Scenario

Source: World Energy Outlook 2012

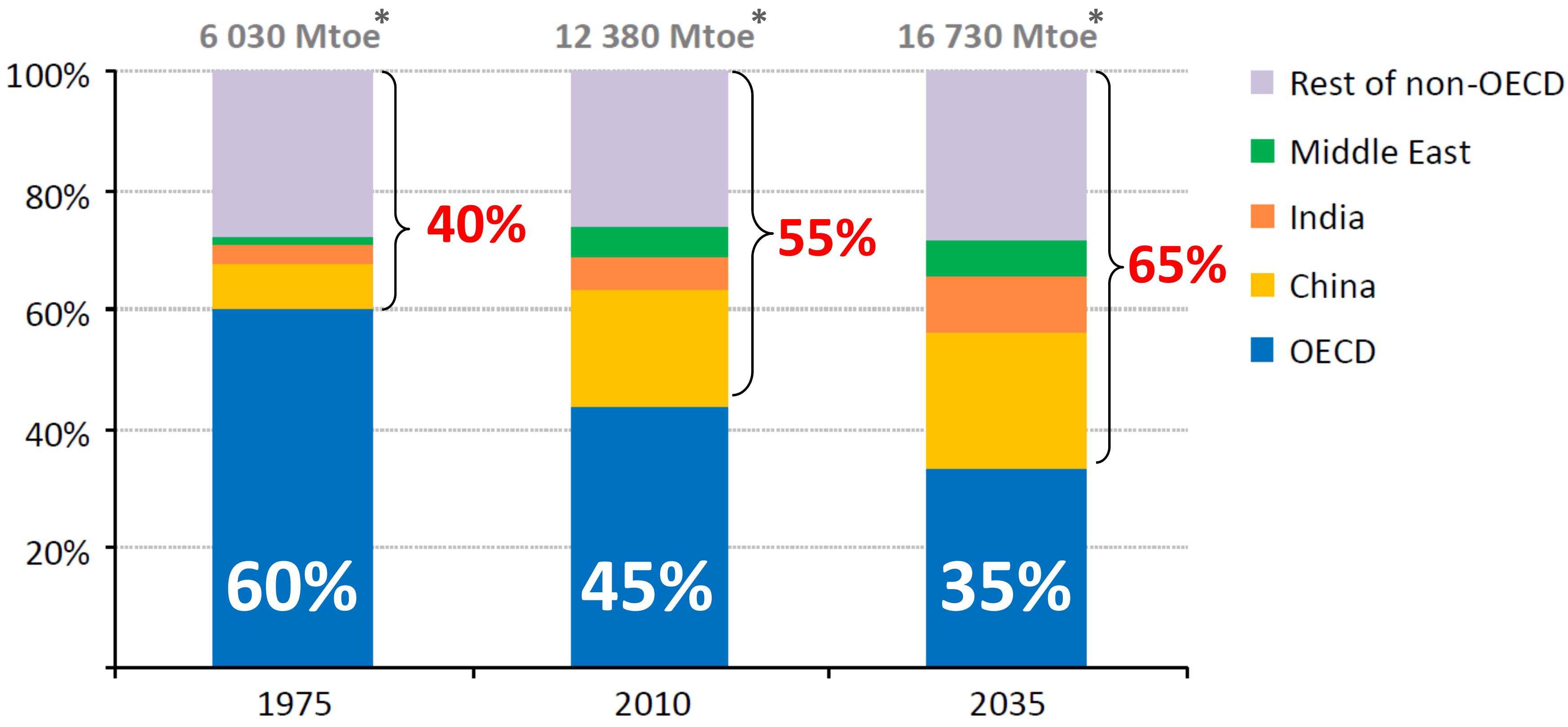
2-2. World Primary Energy Demand by Fuel in the New Policies Scenario



Fuel	2010/35 CAGR
Coal	0.8%
Oil	0.5%
Gas	1.6%
Nuclear	1.9%
Others	2.4%
Total	1.2%

Source: World Energy Outlook 2012

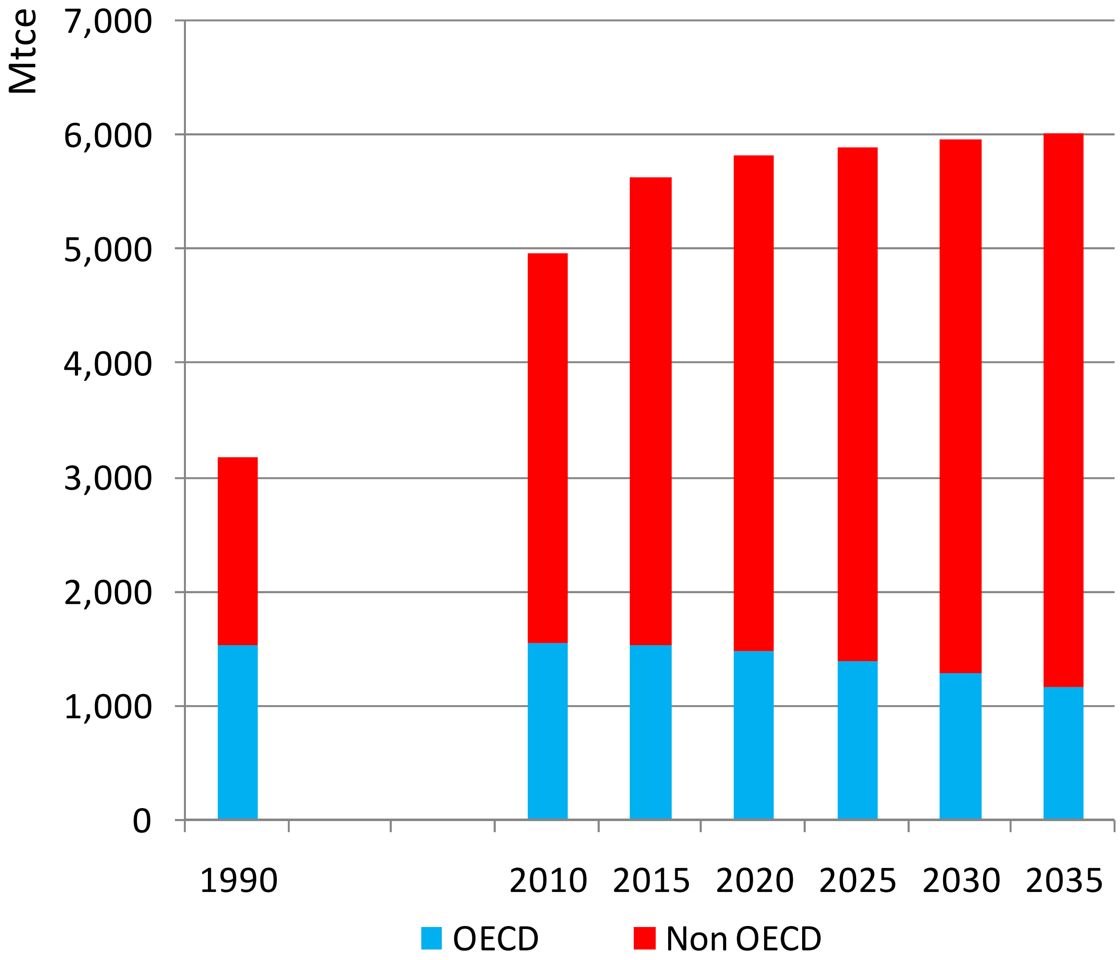
2-3. Share of Global Energy Demand <u>in the New Policies Scenario</u>



* Excludes international bunkers

Source: IEA "World Energy Outlook 2012", presentation to the press

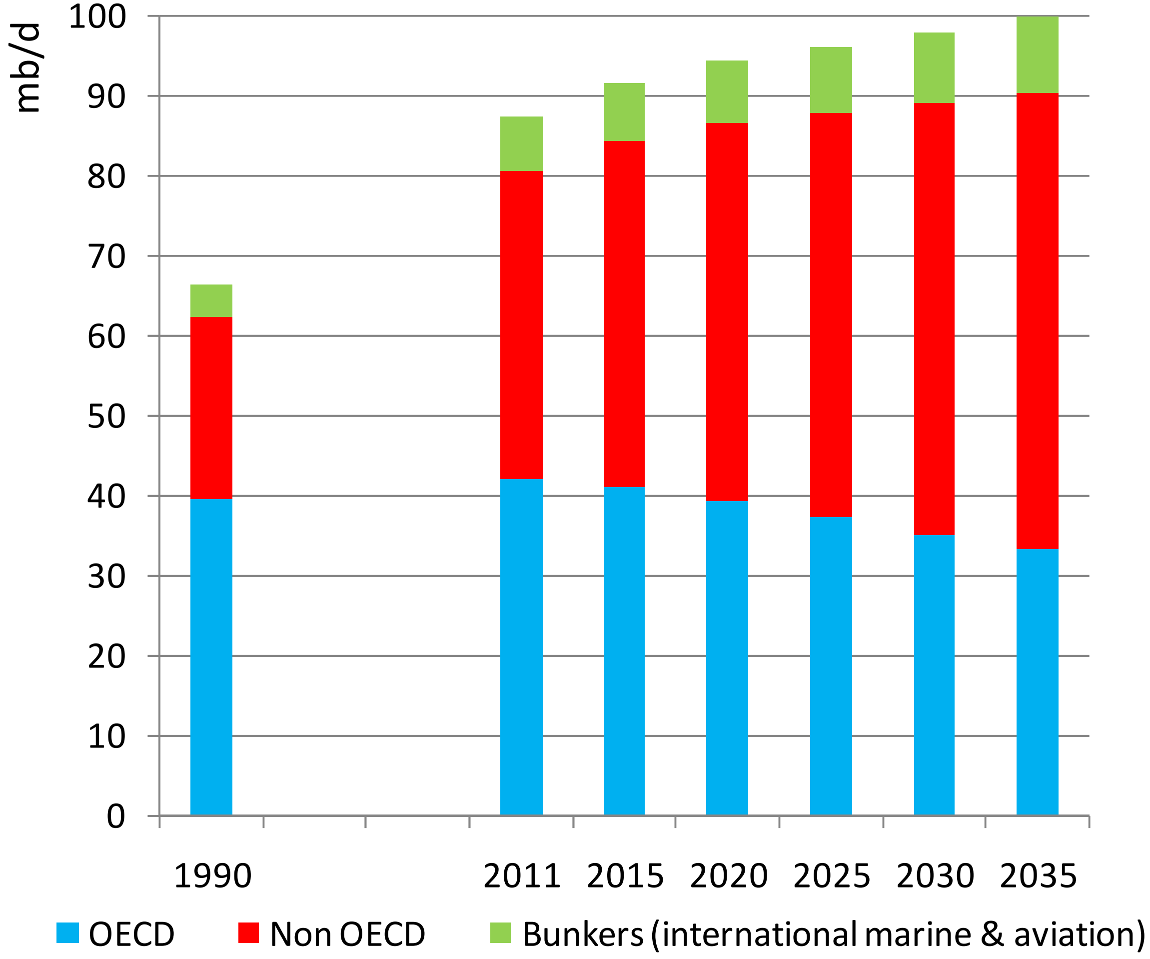
2-4. Coal Demand in the New Policies Scenario



Region	2010/35 CAGR
OECD	**-1.1%**
Non OECD	**1.4%**
of which:	
China	**0.8%**
India	**3.4%**
ASEAN	**4.6%**
Middle East	**2.4%**
Total	**0.8%**

Source: World Energy Outlook 2012

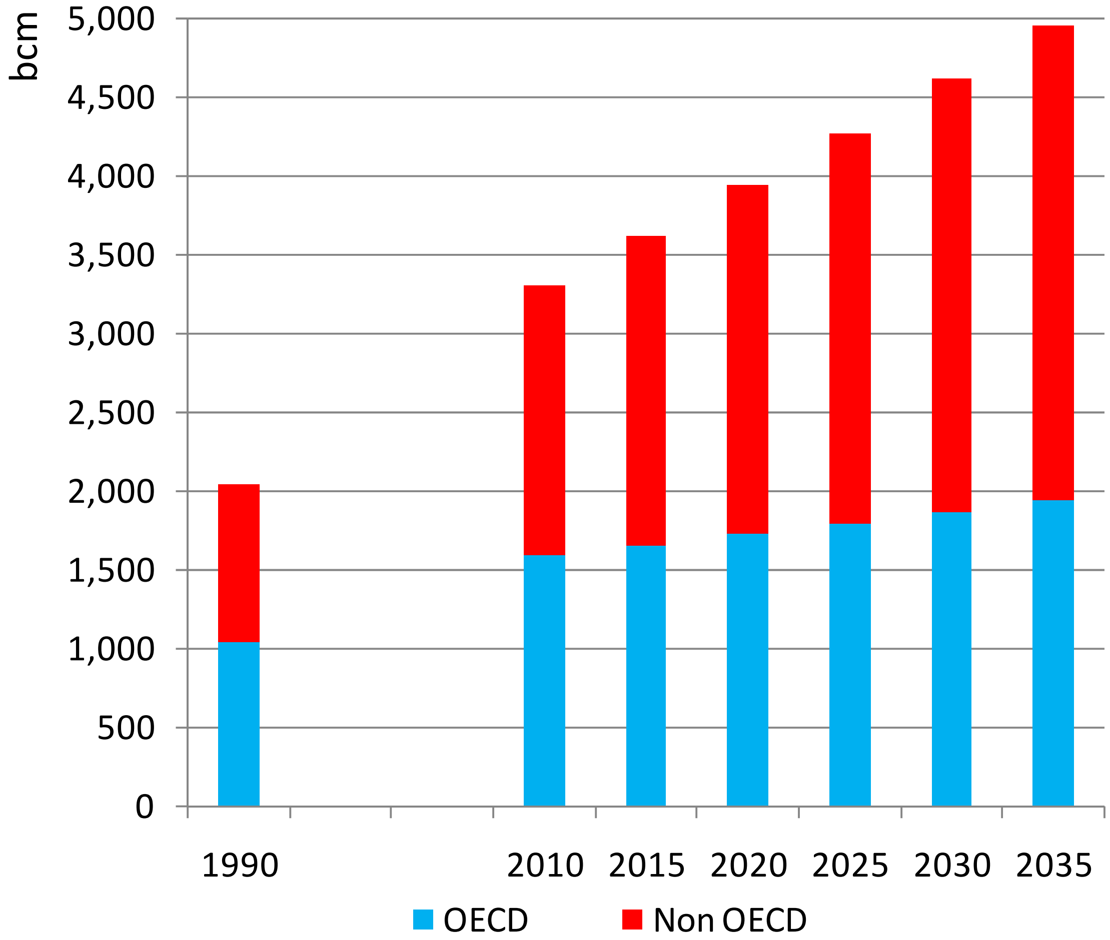
2-5. Oil Demand in the New Policies Scenario



Region	2011/35 CAGR
OECD	**-1.0%**
Non OECD	**1.7%**
of which:	
China	**2.2%**
India	**3.3%**
Middle East	**1.4%**
Africa	**1.6%**
Total	**0.6%**

Source: World Energy Outlook 2012

2-6. Gas Demand in the New Policies Scenario



Region	2010/35 CAGR
OECD	**0.8%**
Non OECD	**2.3%**
of which:	
China	**6.6%**
Brazil	**4.3%**
India	**4.2%**
Africa	**2.2%**
Total	**1.6%**

Source: World Energy Outlook 2012

3. Summary - World Economy and Energy

1. **World economy** is expected to grow at a modest pace.
2. **Uncertainties** to be paid close attention - US fiscal policy, China Liconomics turning to healthy growth, financial crisis in certain European countries and Japan Abenomics.
3. **World primary energy demand** in 2035 is expected to grow by 35% (or 1.2% CAGR) from 2010, led by China and emerging economies.
4. **Natural gas demand** will show steady and robust growth both in OECD and non-OECD economies, whereas oil and coal consumption will be saturated in OECD. Fossil fuels will remain dominant energy sources.

Thank you.