



# **ROADBLOCKS AND PATHWAYS FOR CLIMATE FINANCES**

**Dr. Paul Oquist**

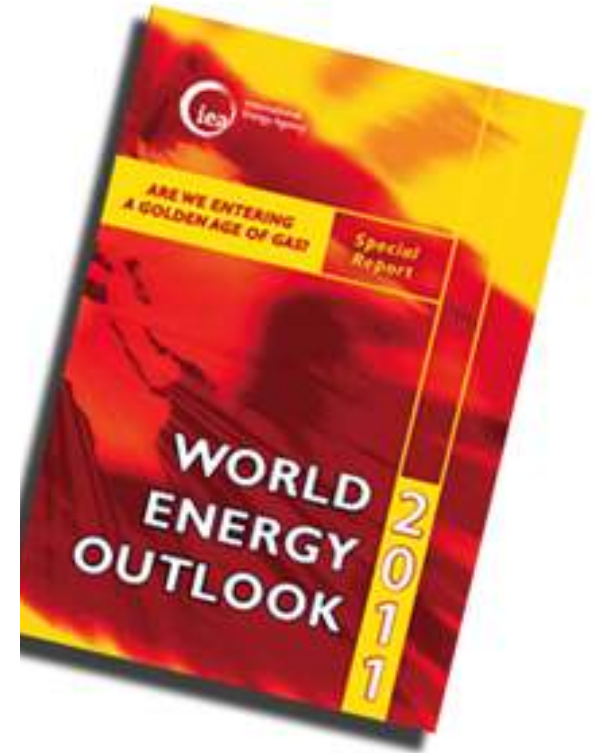
**Nicaragua**

Member of the Standing Committee of Climate Finance  
for Latin America and the Caribbean

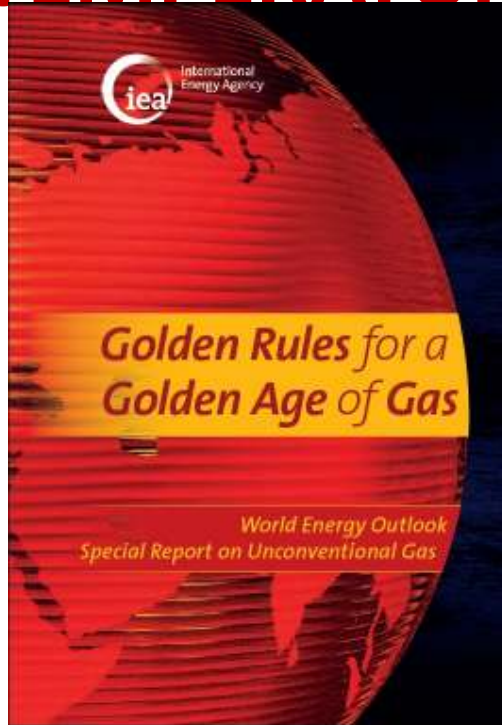
Manila, Philippines, July, 2013

# TOWARDS A TEMPERATURE INCREASE OF 3.5°C TO 6°C

- "We can not afford to defer further action needed to tackle climate change that to achieve a reasonable cost to the long-term goal of limiting the rise in global average temperature to 2°C, as discussed in the 450 Scenario. *In the New Policies Scenario, the world follows a path that generates a level of emissions that induce a rise in long-term average temperature over 3.5°C.* Without these new policies, the path taken is more dangerous if possible, with a temperature rise of 6°C or even higher. "
- "Deferring action it is a mistake in economic terms: for every dollar not invested in the power sector by 2020, will need to spend US\$ 4.3 more after 2020 to compensate for the increased emissions."
- "Natural gas is the cleanest fossil fuel, but simply increasing the use of gas (without carbon capture and storage) is not sufficient by itself to a path to walk down carbon emissions that fits limiting the global temperature rise to 2°C. "



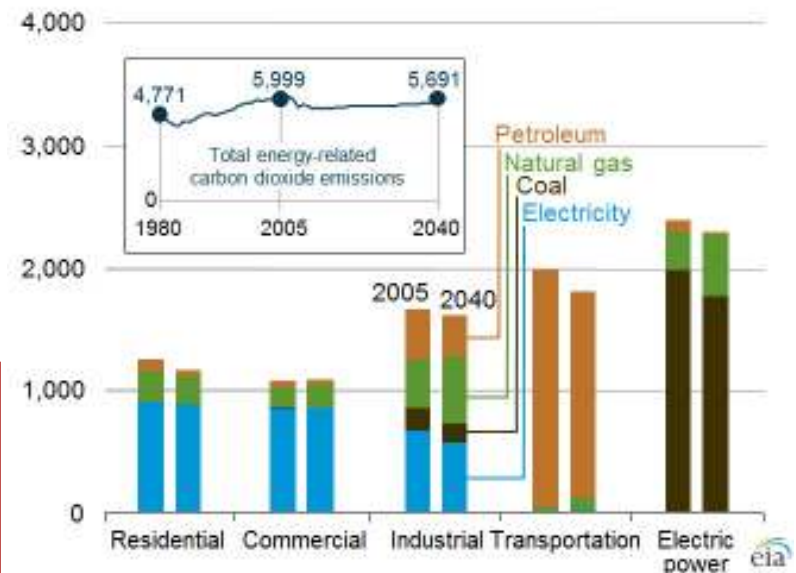
# TEMPERATURE INCREASE: 4°C SCENARIOS



- Natural gas is poised to enter a golden age, but will do so only if a significant proportion of the world's vast resources of unconventional gas – shale gas, tight gas and coalbed methane – can be developed profitably and in an environmentally acceptable manner.
- In the GAS Scenario, as a result, natural gas increased its role in the future global energy mix from 21% to 25% over the period to 2035.

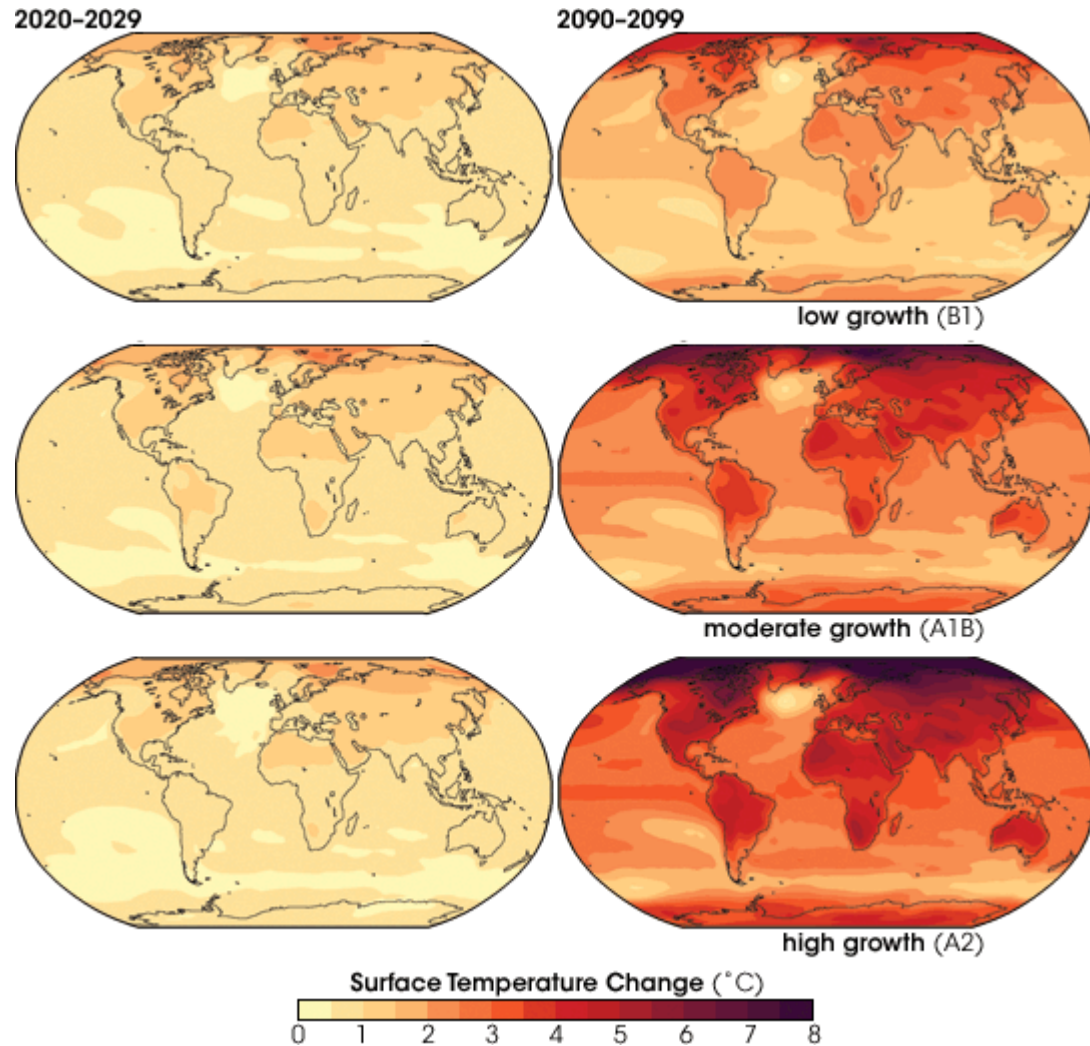
- The natural gas share of total CO<sub>2</sub> emissions increases from 20 percent in 2005 to 28 percent in 2040, as the use of natural gas to fuel electricity generation and industrial applications increases.

Figure 108. U.S. energy-related carbon dioxide emissions by sector and fuel, 2005 and 2040 (million metric tons)



Source: U.S. Energy Information Administration (EIA)

# A LOST DECADE OF GLOBAL ACTION



**THE RESULT OF DOING NOTHING IS NOW VISIBLE. THE 2 DEGREE LIMIT SET FOR THIS CENTURY IN 2009 IS ALREADY A FAILURE.**



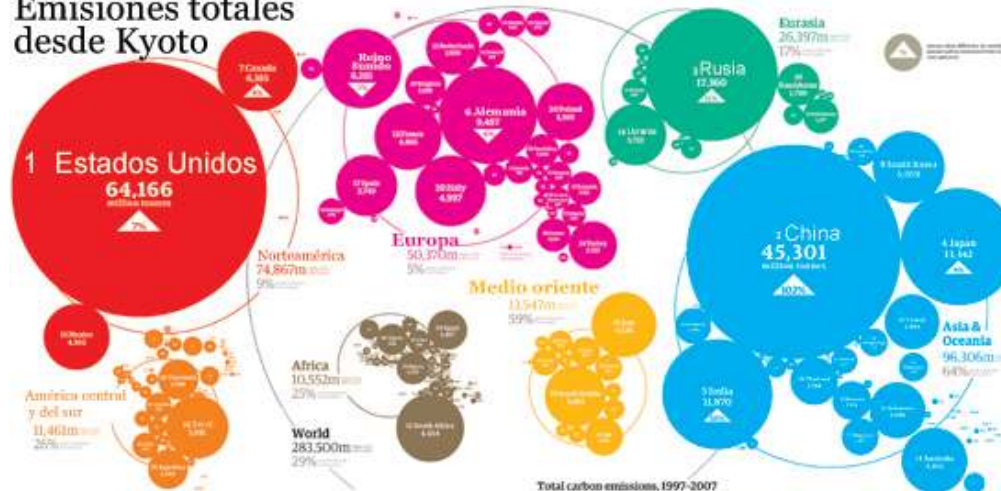
# FROM KYOTO PROTOCOL TO DURBAN PLATFORM

## KYOTO PROTOCOL

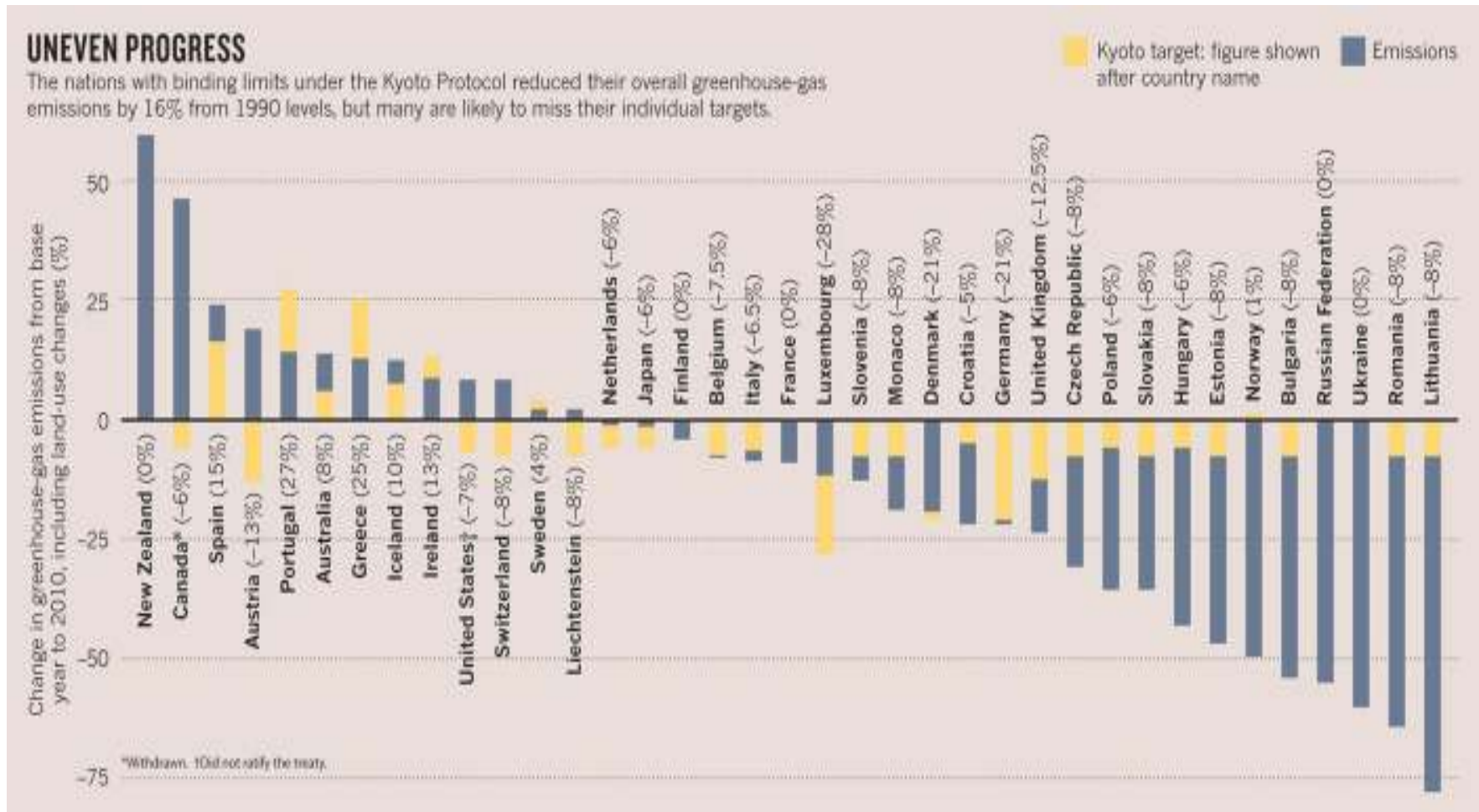
THOSE WHO POLLUTE THE MOST DO NOT SIGN IT



### Emisiones totales desde Kyoto



# UNEVEN PROGRESS

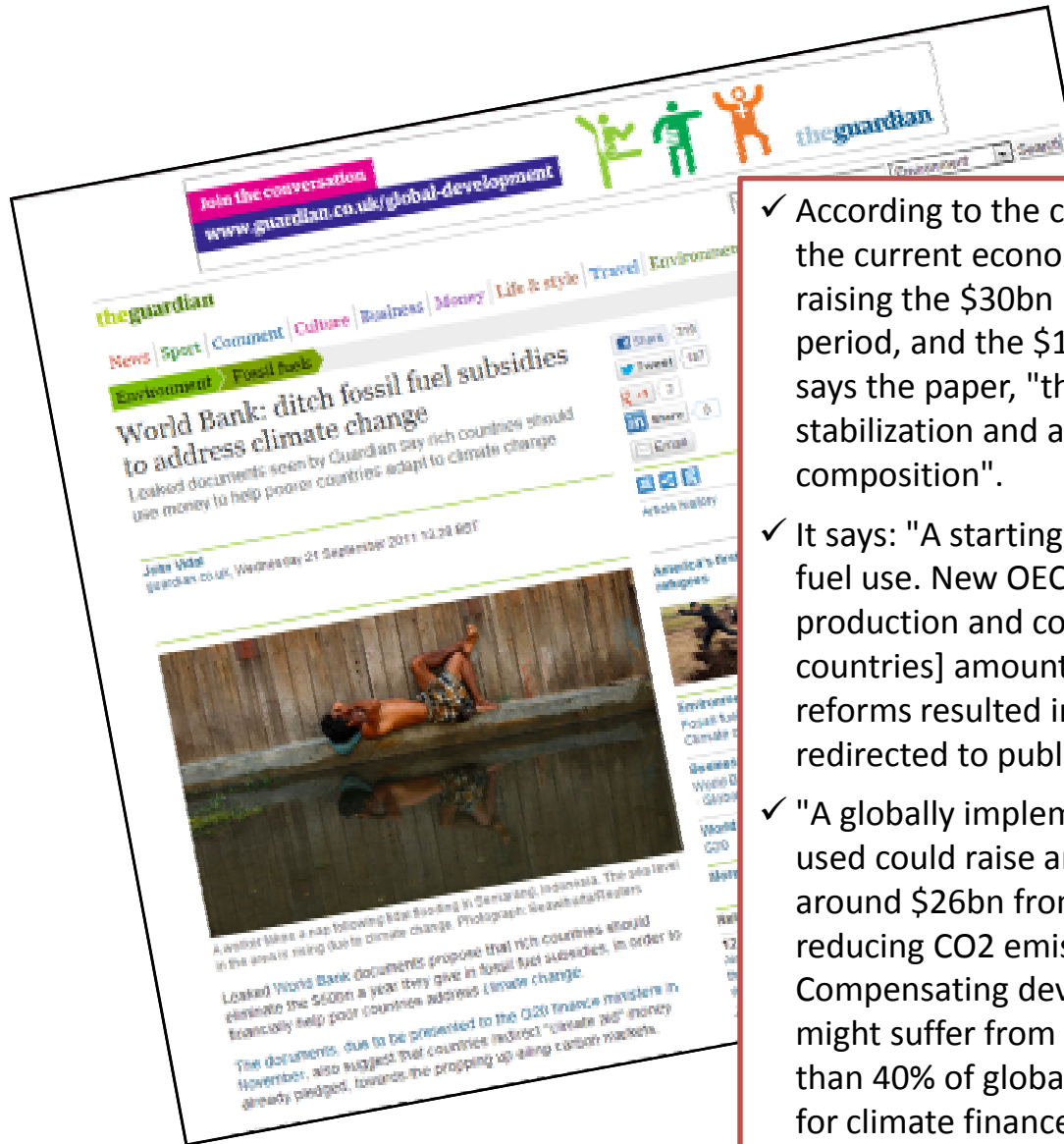


Source: Netherlands Environ. Assessment agency/ec joint res. Centre

# FINAL STATEMENT OF THE G20 SUMMIT IN CANNES, FRANCE (3-4 NOVEMBER, 2011)

- G20 expressed willing to work in the green climate fund operationalization based on the report from the committee of transition.
- The financing of the fight against climate change declared as one of the main priorities, based on the Copenhagen commitment of moving together us\$ 100 billion annual of all sources for the year 2020 intended to assist developing countries on mitigation and adaptation to climate change.
- G20 confirmed that climate funding must come from various sources, both public and private, bilateral and multilateral, making an emphasis on the role of private sources, especially through market mechanisms, and make a call to the regional banks to develop new e innovative financial instruments to increase its multiplier effect on private capital flows.
- G20 discussed the report prepared by the World Bank-IMF-OECD-Regional Development Banks on climate finance and made a call to consider the objectives, principles and provisions of the framework convention for the international financial institutions and relevant organizations of nations united. Finance ministers were asked to report progress in climate finances in the next summit.
- Russia, Japan and Canadá refused to sign a second period of commitments to the Kyoto Protocol, and the United States, China and India are not binding obligations under Kyoto.

# THE WORLD BANK ON CLIMATE FINANCING ALTERNATIVES



- ✓ According to the confidential paper, there is little likelihood that in the current economic climate, public money will be available for raising the \$30bn rich countries have pledged for the 2010-2012 period, and the \$100bn a year that must be found by 2020. Instead, says the paper, "the large financial flows required for climate stabilization and adaptation will, in the long run, be mainly private in composition".
- ✓ It says: "A starting point should be the removal of subsidies on fossil fuel use. New OECD estimates indicate that reported fossil fuel production and consumption supports in Annex II countries [24 OECD countries] amounted to about \$40-\$60bn per year in 2005-2010 ... if reforms resulted in 20% of the current level of support being redirected to public climate finance, this could yield \$10bn per year.
- ✓ "A globally implemented carbon charge of \$25/tonne CO<sub>2</sub> on fuel used could raise around \$13bn from international aviation and around \$26bn from international maritime transport in 2020, while reducing CO<sub>2</sub> emissions from each industry by around 5 to 10%. Compensating developing countries for the economic harm they might suffer from such charges ... seems unlikely to require more than 40% of global revenues. This would leave about \$24bn or more for climate finance or other uses," says the paper.



# THE FAILURE OF CLIMATE FINANCING

Fast Initial Financing of US\$ 30 billion for 2010-2012 with funding new, additional and sufficient (Agreed in Copenhagen)

## Goal

**US\$ 30 Billions**

## Funds committed

**US\$ 34.36 Billion**

(114 %)

## Funds approved

**US\$ 10.71Billion**

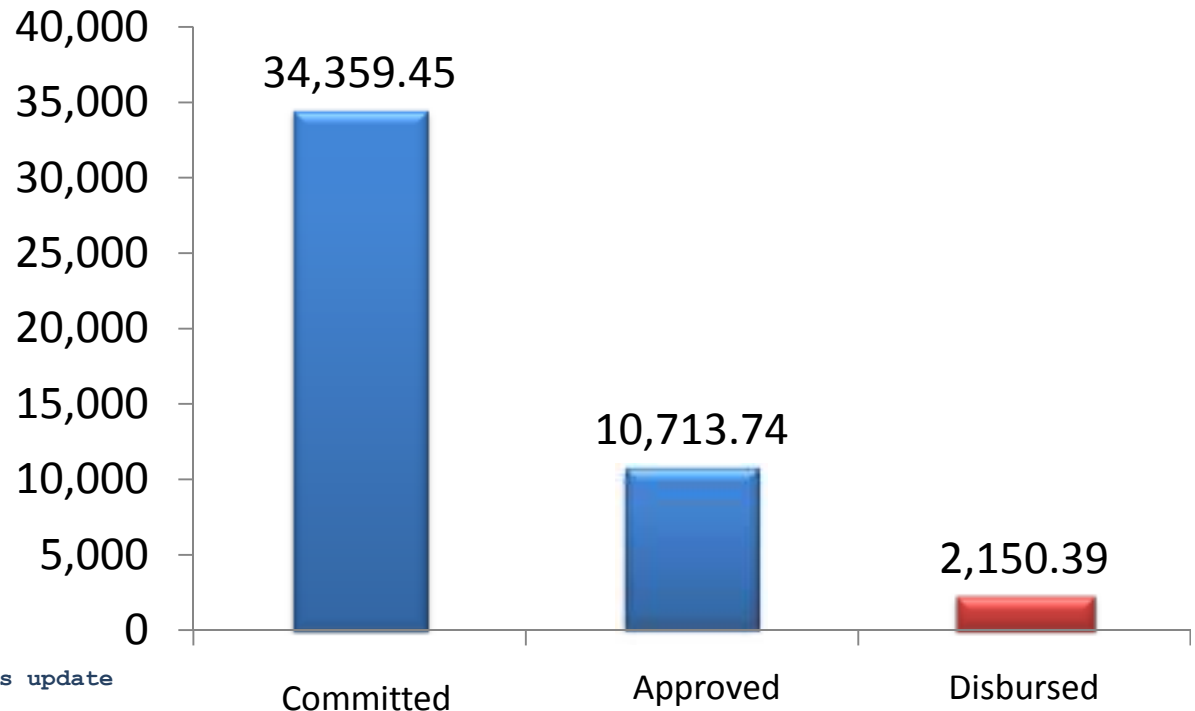
31.18 % of committed

## Funds disbursed

**US\$ 2.15 Billion**

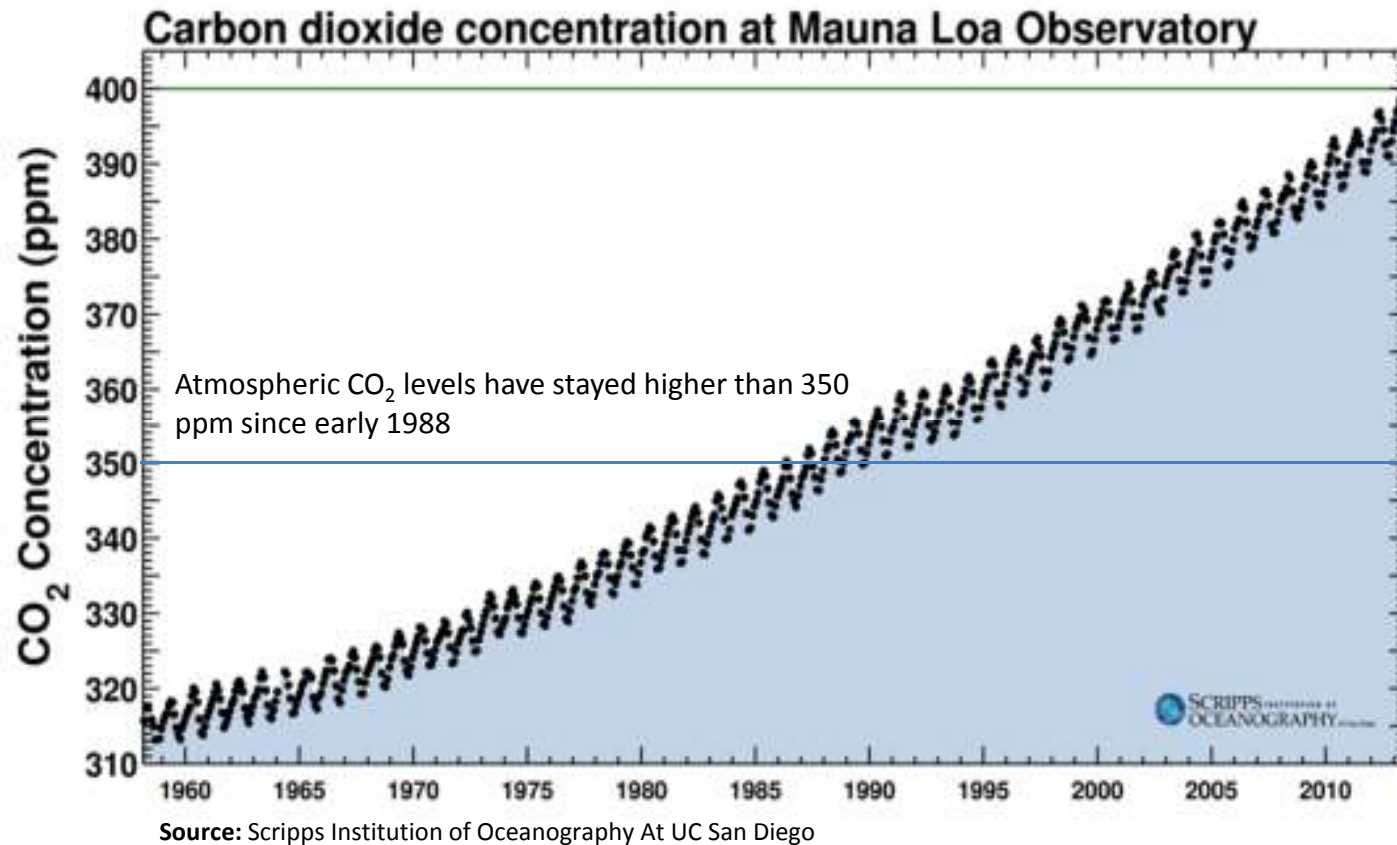
**6.26%**

Climate Finance 2010-2012  
(US\$ Millions)



Source: climate funds update

# CARBON DIOXIDE CONCENTRATION



- The level of greenhouse gases in the atmosphere has increased from 280 ppm in pre-industrial times to 354 ppm in 1990, crossing the critical threshold of 350 ppm, and are now more than 390 ppm.

- Failure to reverse the annual increase of greenhouse gases by 2017, the scenario of 450 ppm in the year 2035 and the temperature rise limit 2°C in this century will be lost, there is already talk of scenarios between 3.5 to 6 degrees (IEA).

June 2011: 393.72 ppm CO<sub>2</sub>

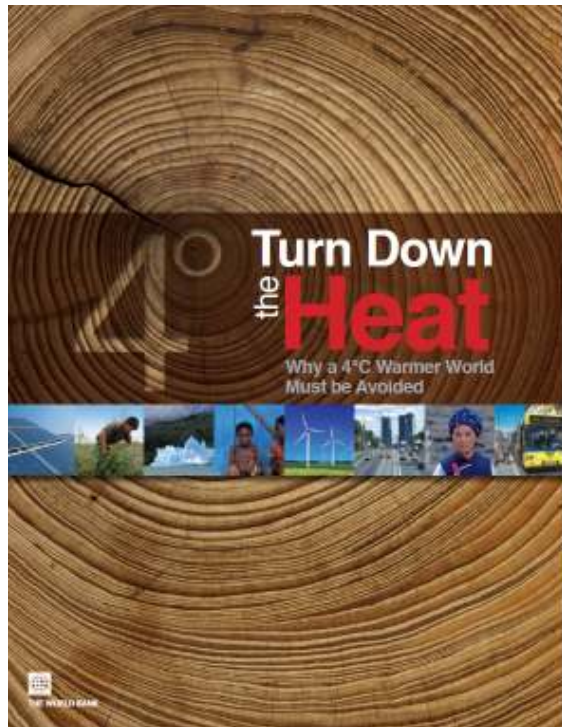
June 2012: 395.83 ppm CO<sub>2</sub>

June 2013: 398.58 ppm CO<sub>2</sub>

Source: NOAA

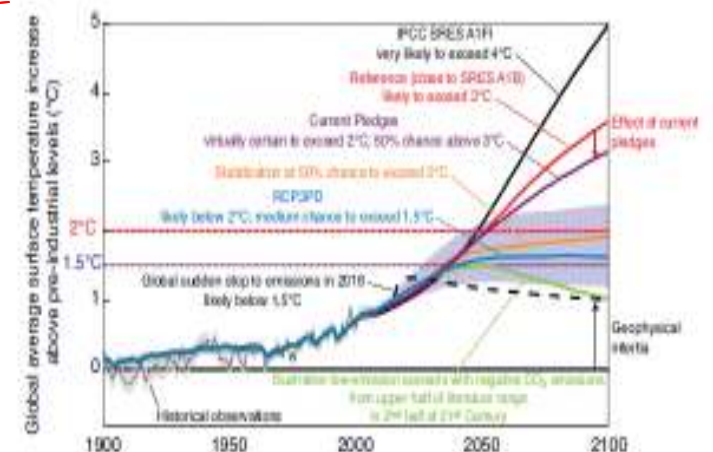
- For every dollar of investment avoided in the power sector before 2020, will require an additional U.S. \$ 4.30 to compensate for the increased emissions after 2020 (IEA).

# TEMPERATURE INCREASE: 4°C SCENARIOS



- The 4°C scenarios are devastating: the inundation of coastal cities; increasing risks for food production potentially leading to higher malnutrition rates; many dry regions becoming dryer, wet regions wetter; unprecedented heat waves in many regions, especially in the tropics; substantially exacerbated water scarcity in many regions; increased frequency of high-intensity tropical cyclones; and irreversible loss of biodiversity, including coral reef systems.
- And most importantly, a 4°C world is so different from the current one that it comes with high uncertainty and new risks that threaten our ability to anticipate and plan for future adaptation needs.
- The lack of action on climate change not only risks putting prosperity out of reach of millions of people in the developing world, it threatens to roll back decades of sustainable development.

- Indicates the likely starting time of heating to 4°C or more.
- In the highest scenario (SRES A1FI), the median estimate (50% probability) of warming reaches 4°C by 2080.
- Even if the political commitments of the climate convention in Copenhagen and Cancun are fully implemented, there is still a possibility of more than 4°C in 2100.
- Failure to meet the promises and current trends of carbon intensity, then the higher emissions scenarios show a 4°C global mean warming in the last quarter of this century.

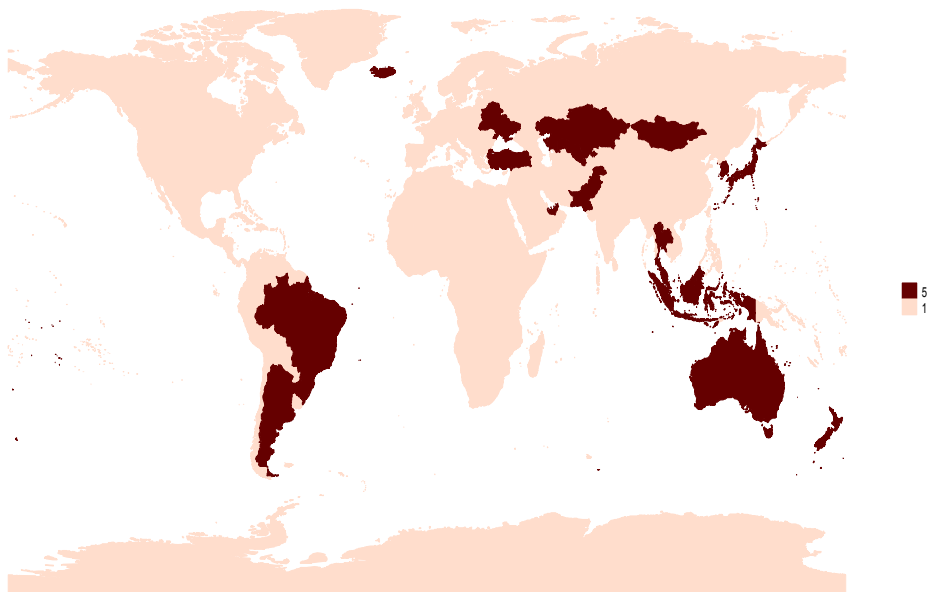


# **CLIMATE FINANCE ALTERNATIVES**



## CHINA'S SWAP AGREEMENT WITH OTHER COUNTRIES

## China's Swap Agreement with other Countries



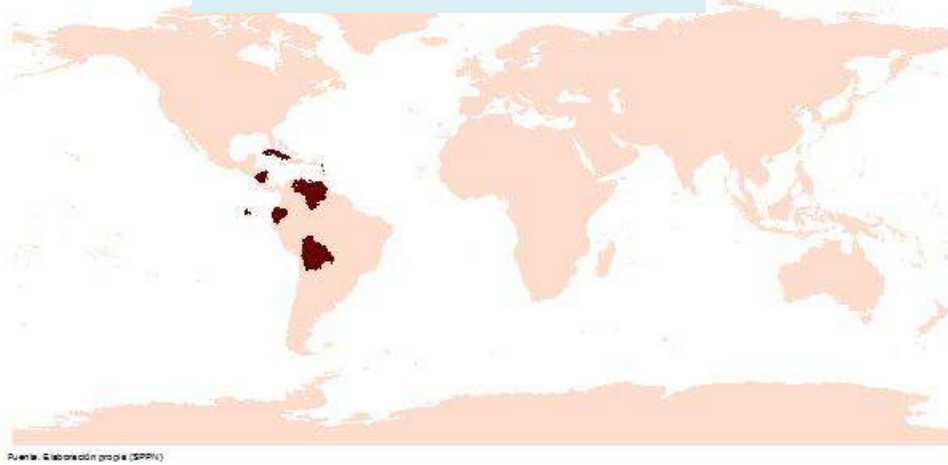
Source: The PBoC, BBVA, & Bloomberg

Agreement			Effective	Expirati
	size	US\$ Dollars	Date	on
China-South Korea	180 bn RMB/38 Tr Won	26.29 billions	Dec-08	Dec-11
Renewed	360 bn RMB/64 Tr Won	40.87 billions	oct-11	oct-14
China-Hong Kong	200 bn RMB/227 bn HKD	29.26 billions	Jan-09	Jan-12
Renewed	400 bn RMB/490 bn HKD	62.93 billions	nov-11	nov-14
China-Malaysia	80 bn RMB/40 bn MYR	11.70 billions	feb-09	feb-12
Renewed	180 bn RMB/90 bn MYR	28.52 billions	feb-12	feb-15
China-Belarus	20 bn RMB/8 tr BYB	2.93 billions	mar-09	mar-12
China-Indonesia	100 bn RMB/ 175 tr Rupiah	14.62 billions	mar-09	mar-12
	70 bn RMB/ Equal Amount			
China-Argentina	Peso	10.23 billions	mar-09	mar-12
China-Iceland	3.5 bn RMB/66 bn ISK	0.51 billions	jun-10	jun-13
China-Singapore	150 bn RMB/30 bn SGD	22.14 billions	jul-10	jul-13
China-New Zealand	25 bn RMB	3.66 billions	Apr-11	Apr-14
China-Uzbekistan	0.7 bn RMB	0.10 billions	Apr-11	Apr-14
China-Mongolia	5 bn RMB	0.73 billions	may-11	may-14
Expanded	10 bn RMB	1.52 billions	mar-12	may-14
China-Kazakhstan	7 bn RMB	1.08 billions	jun-11	jun-14
China-Thailand	70 bn RMB/ 320 bn THB	11.00 billions	Dec-11	Dec-14
China-Pakistan	10 bn RMB/140 bn PKR	1.57 billions	Dec-11	Dec-14
China-Japan	70 bn RMB	11.00 billions	Dec-11	Dec-14
China-UAE	35 bn RMB/20 bn AED	5.54 billions	Jan-12	Jan-15
China-Turkey	10 bn RMB/3 bn TRY	1.59 billions	feb-12	feb-15
China-Australia	200 bn RMB/30 bn AUD	31.60 billions	mar-12	mar-15
China-Ukraine	15 bn RMB/19 bn UAH	2.36 billions	jun-12	jun-15
China-Brazil	190 bn RMB/60 bn BRL	30.59 billions	March-13	Mar-16

# ALLIANCES IN AMERICA LATINA

Latin American Integration Association (ALADI) is the largest economic bloc; Nicaragua will join in the coming years. Other economic blocs in the region are: Bolivarian Alliance for the Peoples of Our America (ALBA); Central America Common Market (CACM); Caribbean Community (Caricom); Central American Integration System (SICA); Southern Common Market (Mercosur); Andean Community (CAN) and the Andean Pact; Pacific Alliance; Latin American Integration Association (ALADI); Petrocaribe

Countries members of ALBA



Countries members of the Pacific Alliance



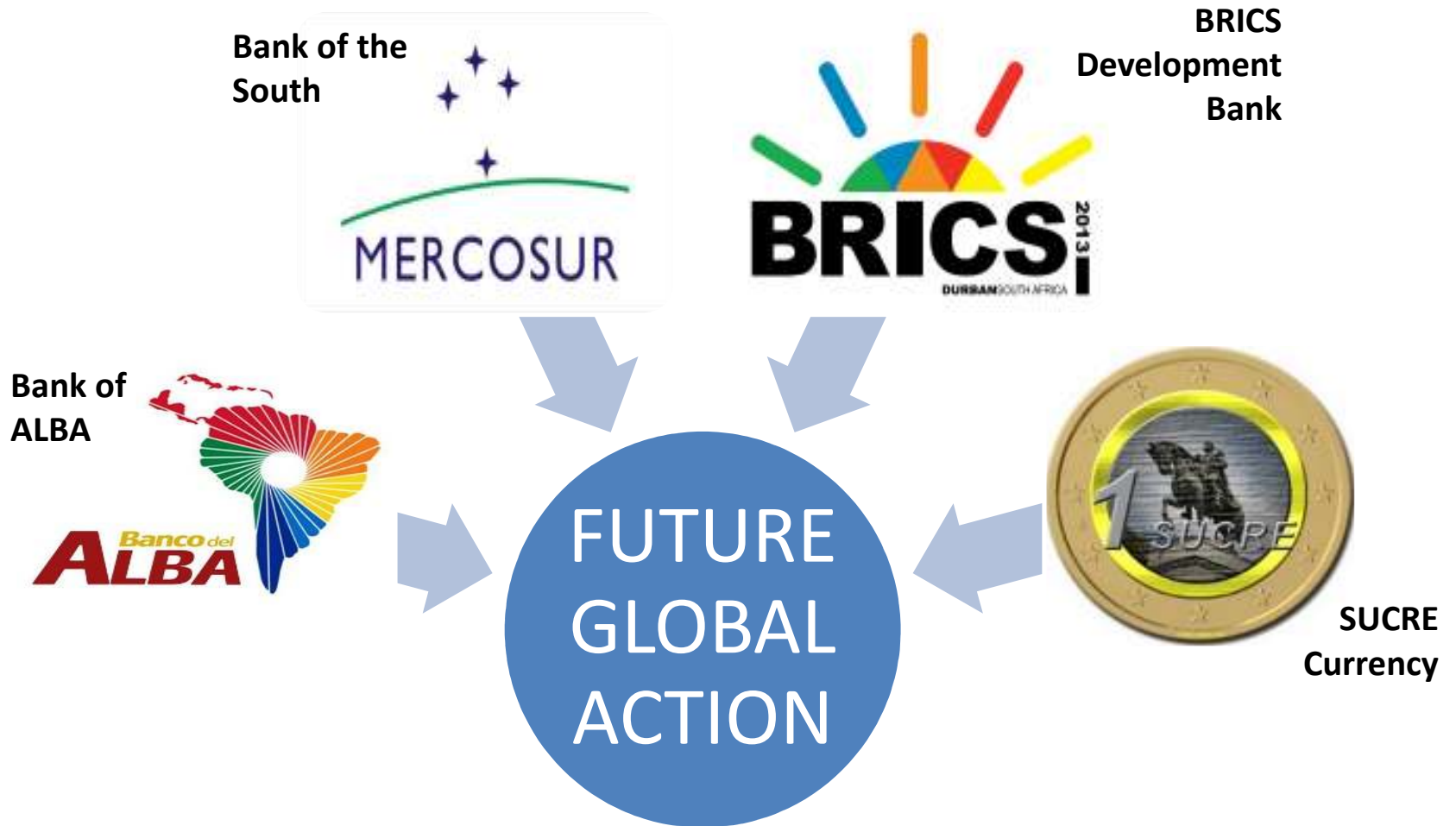
Countries members of Latin American Integration Association (ALADI)



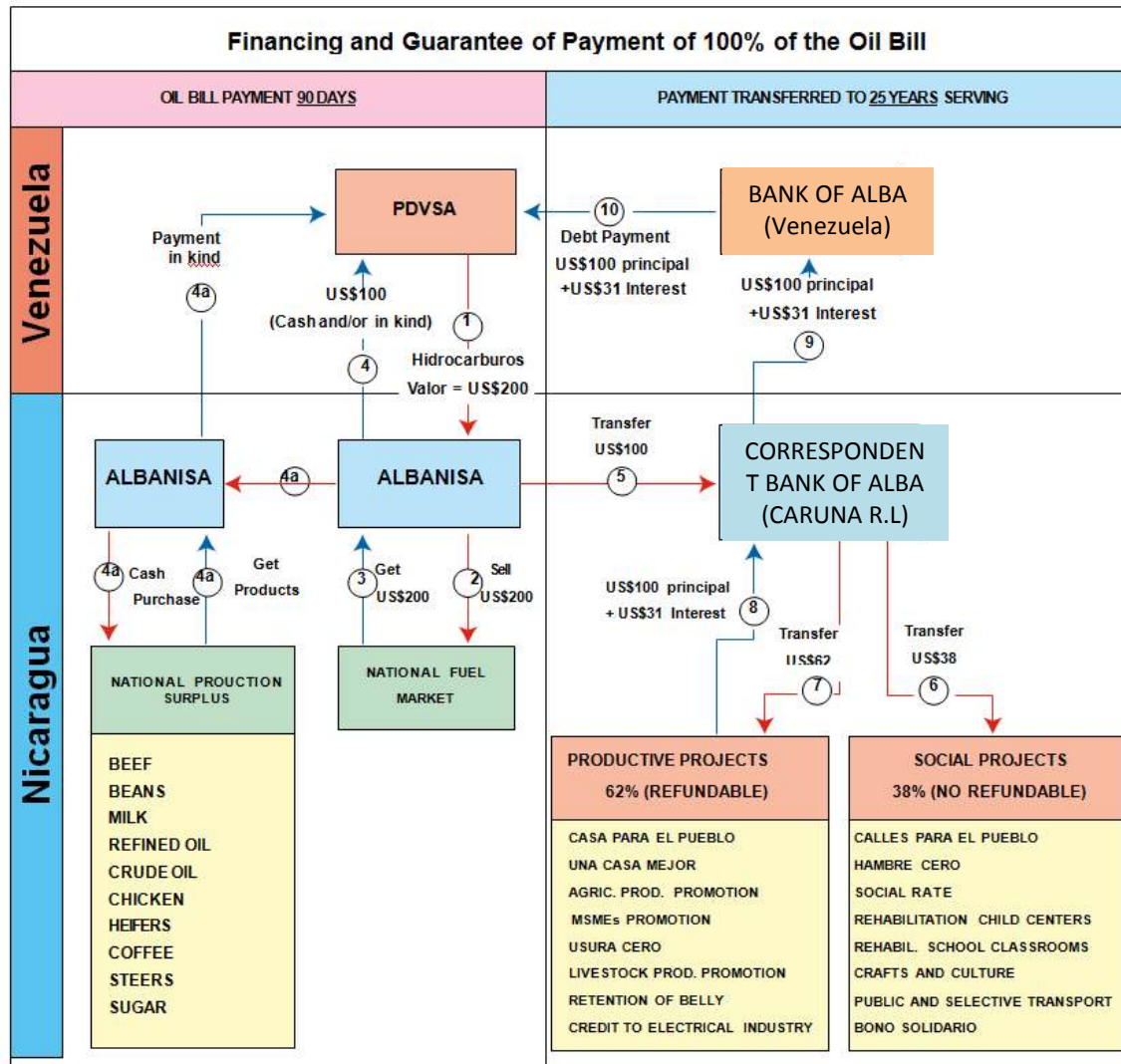
Countries members of Southern Common Market (Mercosur)



# ALTERNATIVES FINANCIAL INSTRUMENTS



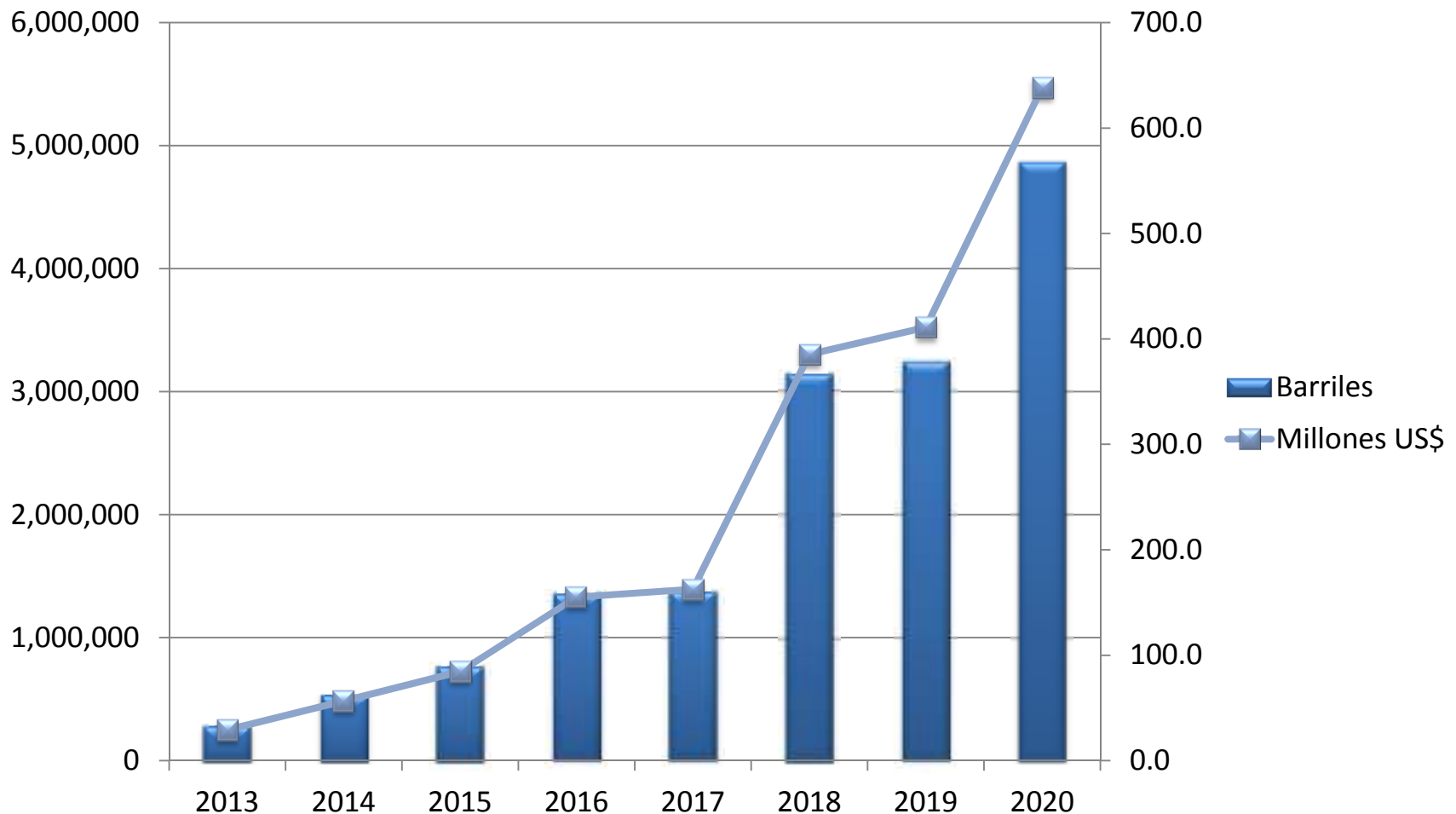
# PETROCARIBE MECHANISM



- ✓ Nicaragua has a guaranteed supply 100% of its oil needs, with 25 years deferred payment with two-year grace period and 2% interest than half of the oil bill.
- ✓ With half deferred funds invested 62% in socio-productive projects that stimulate the economy and allow the returns to amortize payments in the form and time.
- ✓ The other 38% is used to fund social projects not returnable, fully or partially.



# NICARAGUA: SAVING BY TRANSFORMING THE NICARAGUA'S ENERGY MATRIX WITH RENEWABLE ENERGY PROJECTS 2013-2020



# MULTILATERAL TRUST

## Initial Financing Fund

Created from the contribution of:

- \*Multilateral Organizations
- \*Development Banks
- \*Commercial Banks
- \*Developed countries
- \*Beneficiary countries

## Specific projects in selected countries

Savings from reduced oil purchases:

- \*Trust
- \*Payment of the initial fund
- \*Constant flow of resources

## Permanent Fund

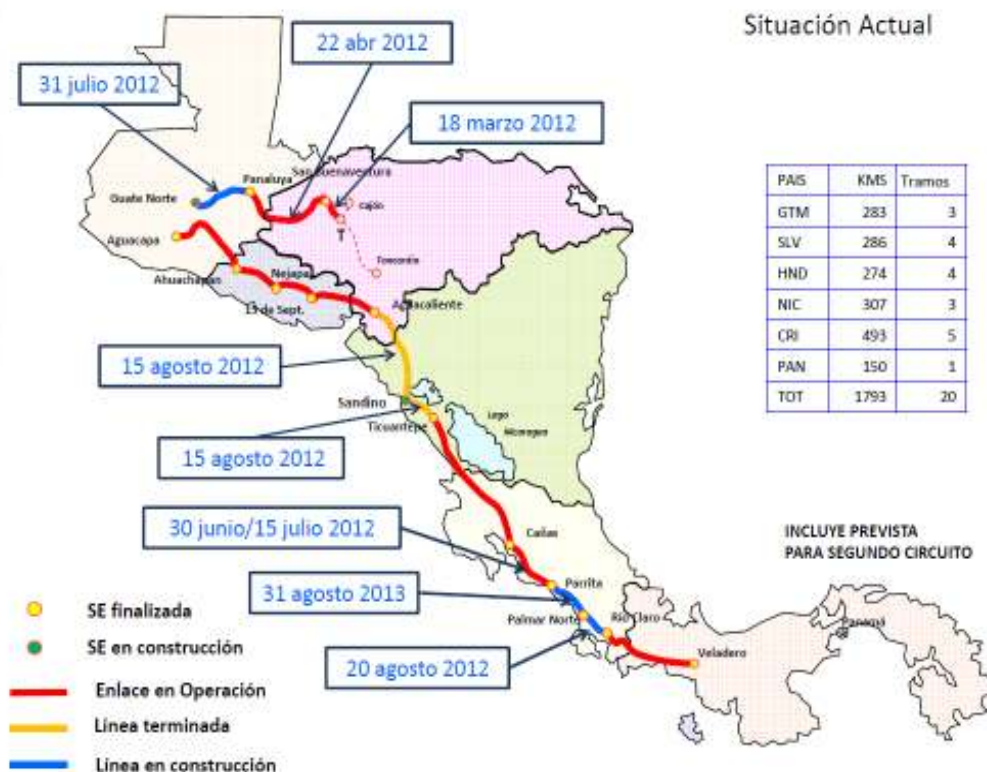
Program and Project Financing  
Adaptation to Climate Change

# **BENEFICIARIES OF THE TRUST**

**Some criteria to be considered:**

- **Countries with high dependence on electric power generation by renewable sources**
- **Developing countries with budget constraints**
- **Severe damages from climate change effects**
- **Difficulties in access to electricity, fuel shortages**
  
- **Do not have funding for such projects**
- **High external indebtedness**

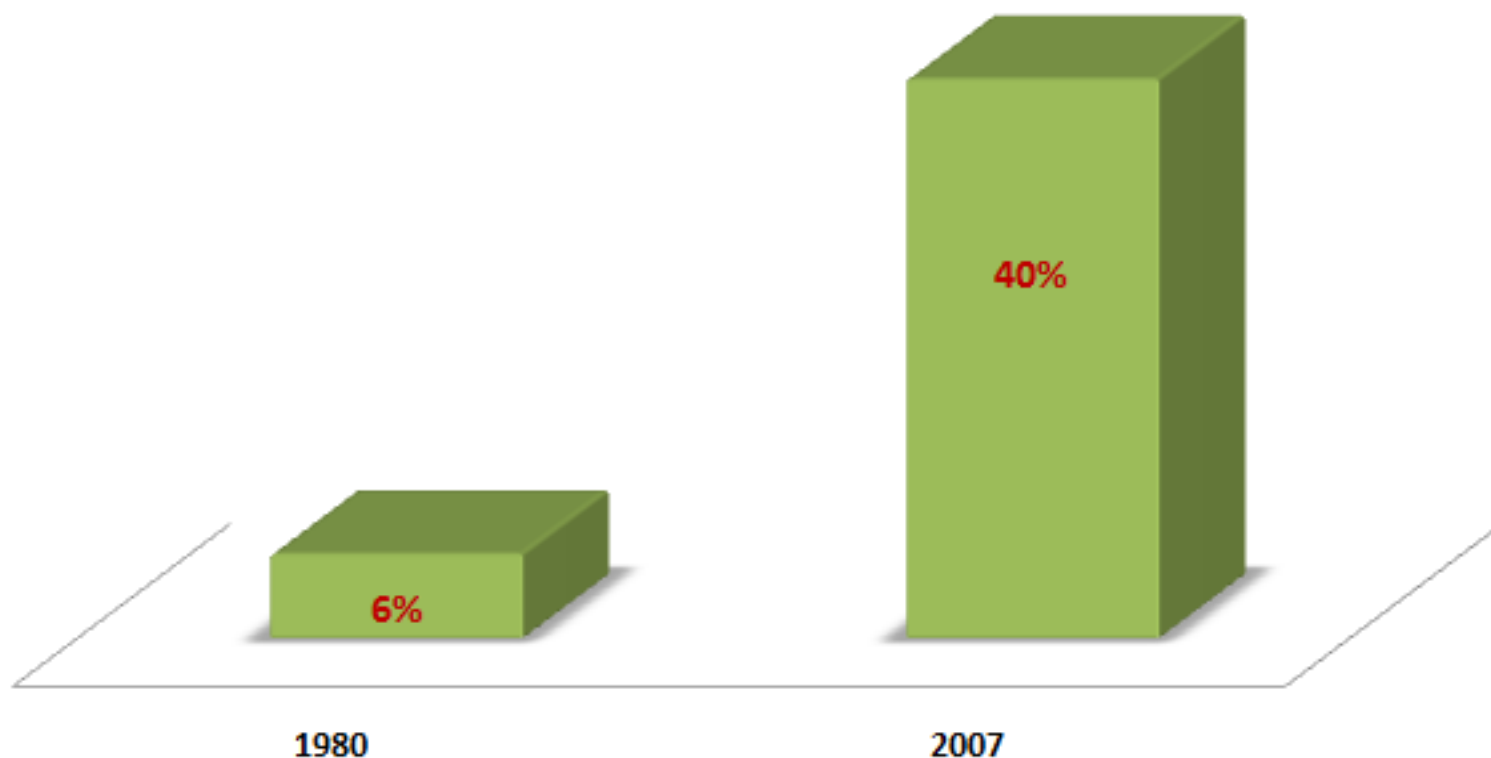
# SIEPAC PROJECT





# GLOBAL ECONOMIC INSTABILITY AND VOLATILITY

Global financial sector profits as a percentage of global corporate profits

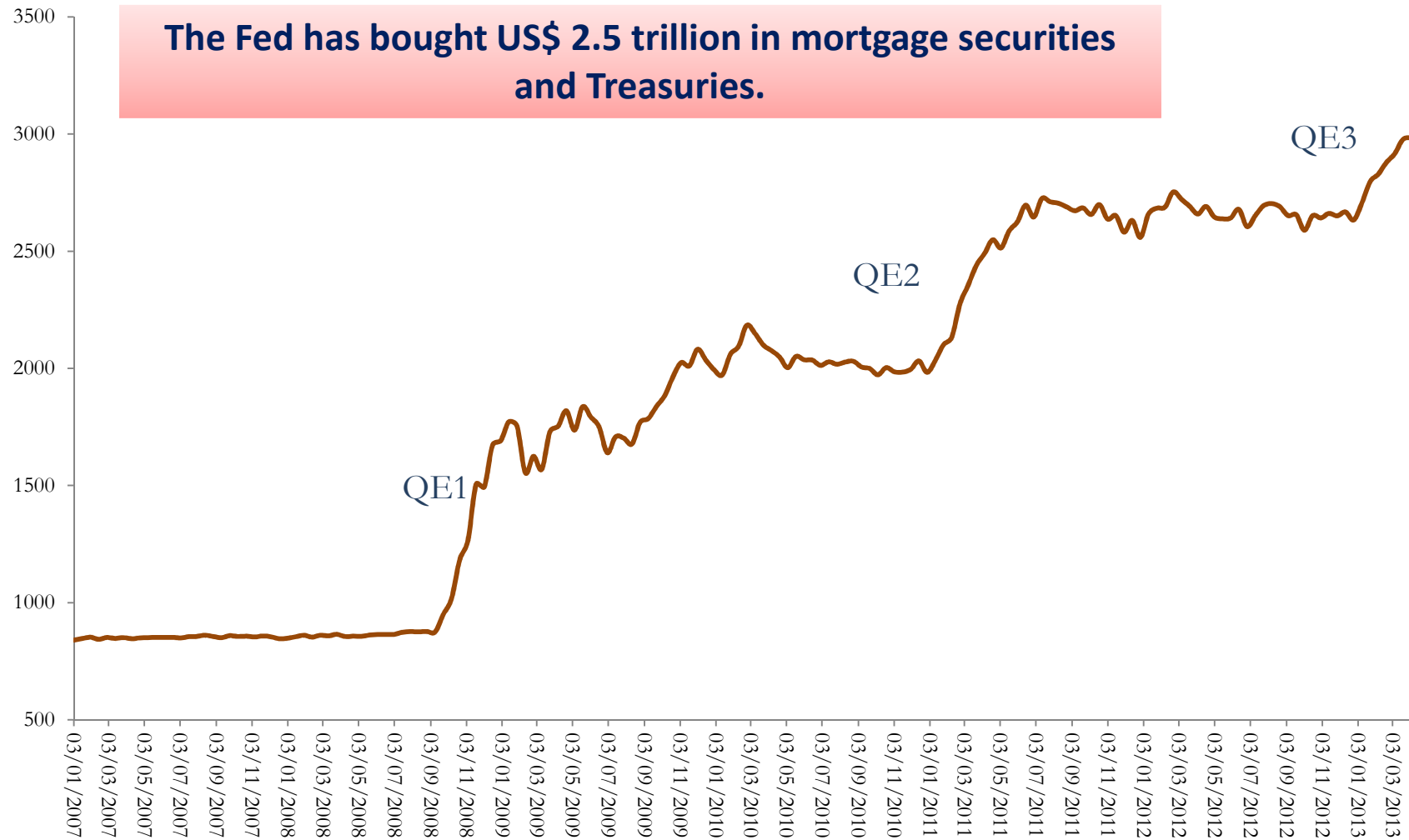


Source: UNCTAD

The struggle for hegemony still supersedes international regulation, cooperation and organization.

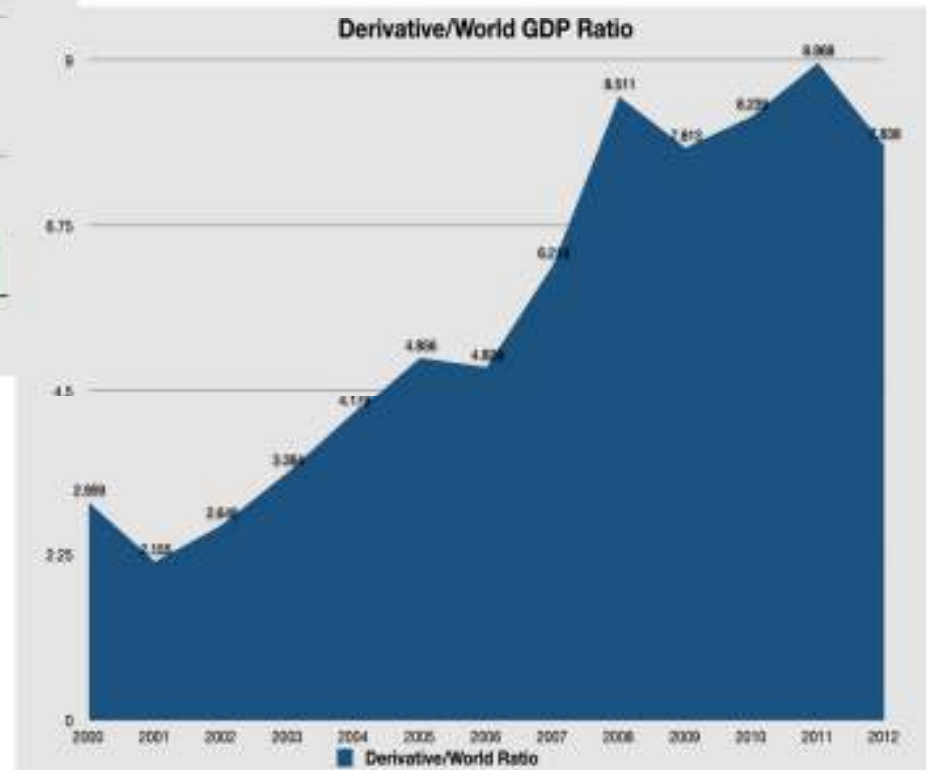
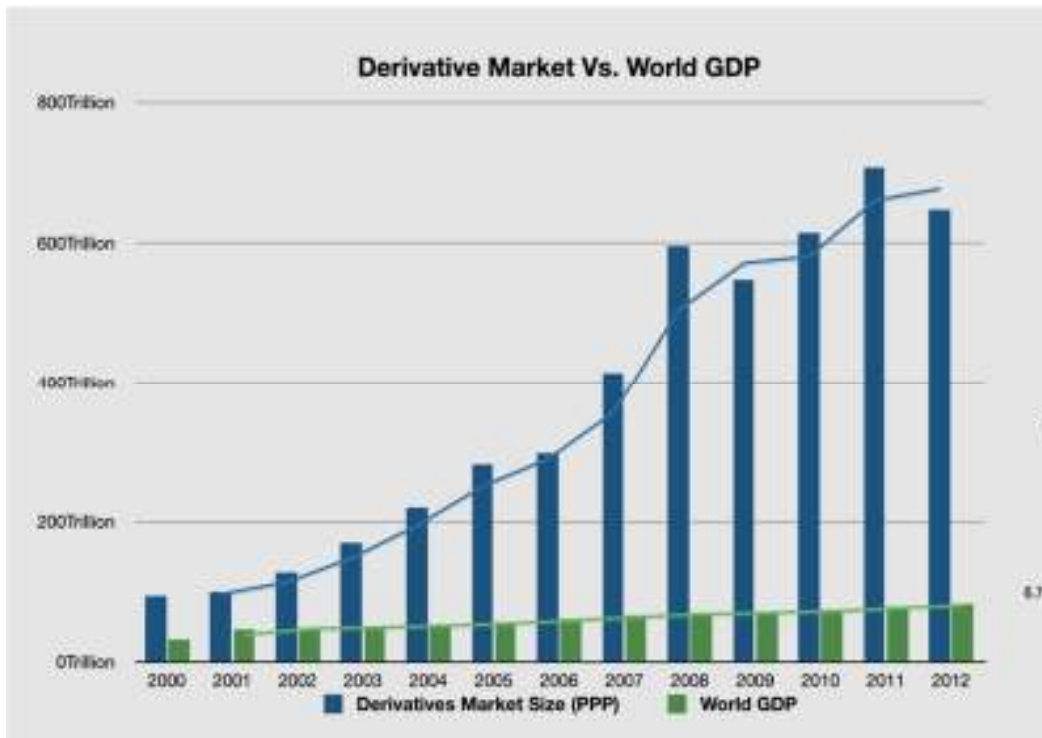
# U.S MONETARY BASE

(Billions of Dollars)



Source: Federal Reserve Bank of St. Louis

# DERIVATIVE MARKET



Source: International Monetary Fund (IMF); Bank for International Settlements (BIS)

# THANK YOU

