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# World Energy Outlook 2015

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# The start of a new energy era?

## ■ Universal agreement from COP21 is an historic milestone that can stimulate energy sector innovation

- *Pledges of 185+ countries account for over 95% of energy-related emissions*
- *Renewables capacity additions at a record-high of 130 GW in 2014*
- *Fossil-fuel subsidy reform, led by India & Indonesia, reduces the global subsidy bill below \$500 billion in 2014*

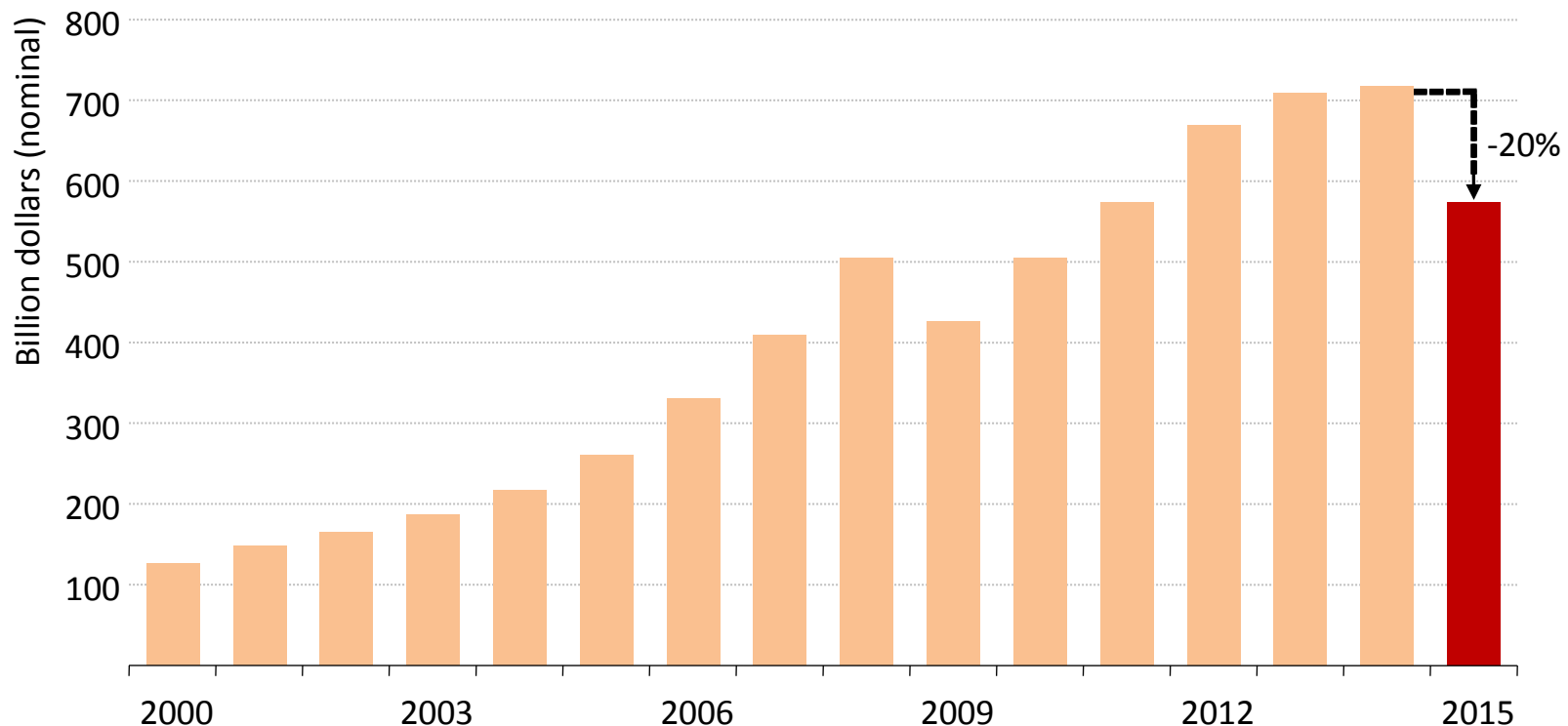
## ■ But 2015 and 2016 have seen lower prices for all fossil fuels

- *Oil faces possibility of second straight year of falling capex in 2016*
- *Gas glut set to grow with new LNG from Australia & US*
- *Coal prices remain at rock-bottom as demand slows in China*

# Upstream investments severely impacted

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## Global upstream oil & gas investment



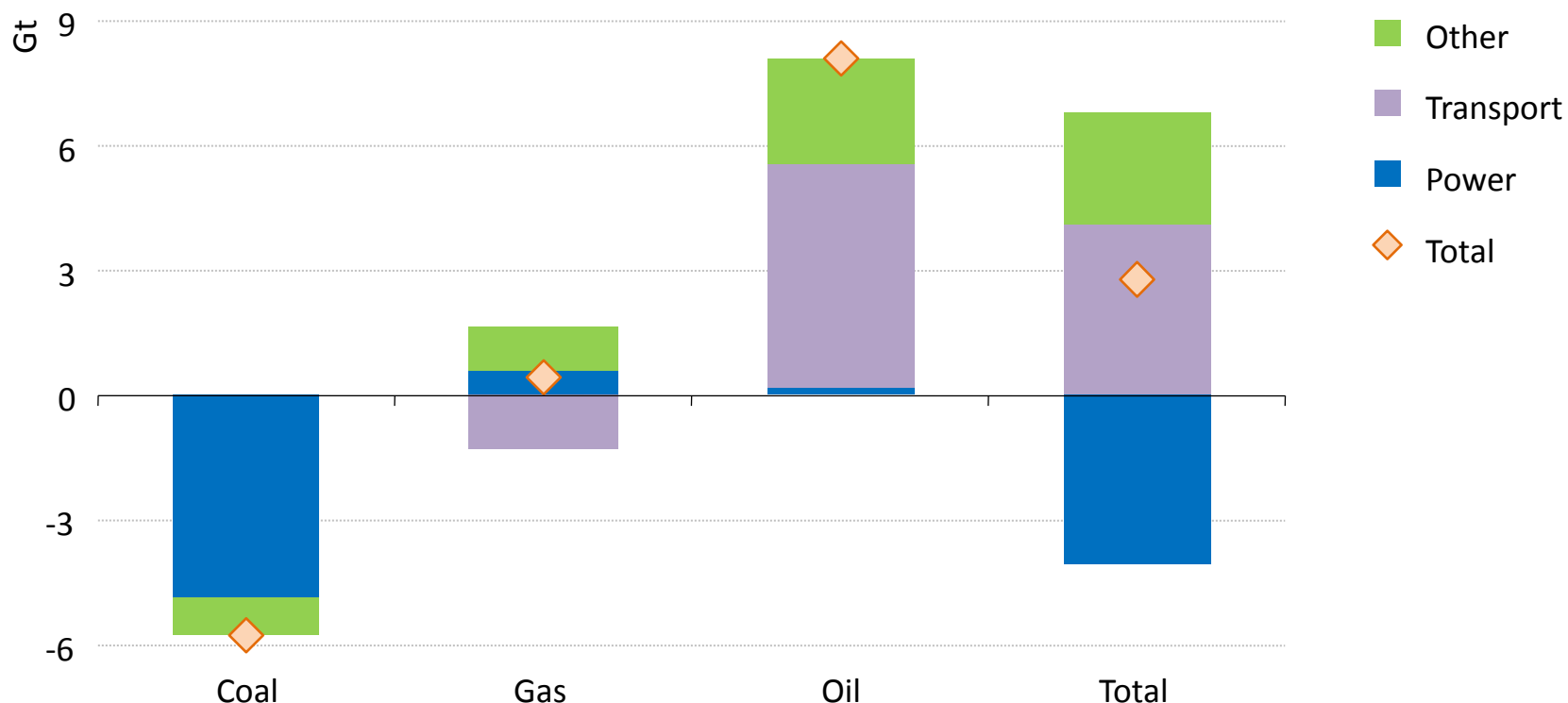
***85% of future upstream investments compensate for declines in existing fields.  
The longer the prices remains low, the greater the risk of a later marked correction.***

# If oil prices stay lower for much longer: what would it take, what would it mean?

- Much more resilient non-OPEC supply & higher output from a stable Middle East could maintain downward pressure on oil prices
- Oil importers gain, each \$1/bbl reduction is \$15 billion off import bills; major window of opportunity to press ahead with subsidy reform
- If lower prices persist for decades, reliance on Middle East oil gets back to 1970s levels; risk of a sharp market rebound if investment falls short
- Lower prices could undercut essential policy support for renewables & energy efficiency, key pillars of the energy transition
- Reduction in revenues to key producers & boost to global oil demand growth make a prolonged period of lower prices progressively less likely

# Lower prices complicate the low-carbon transition

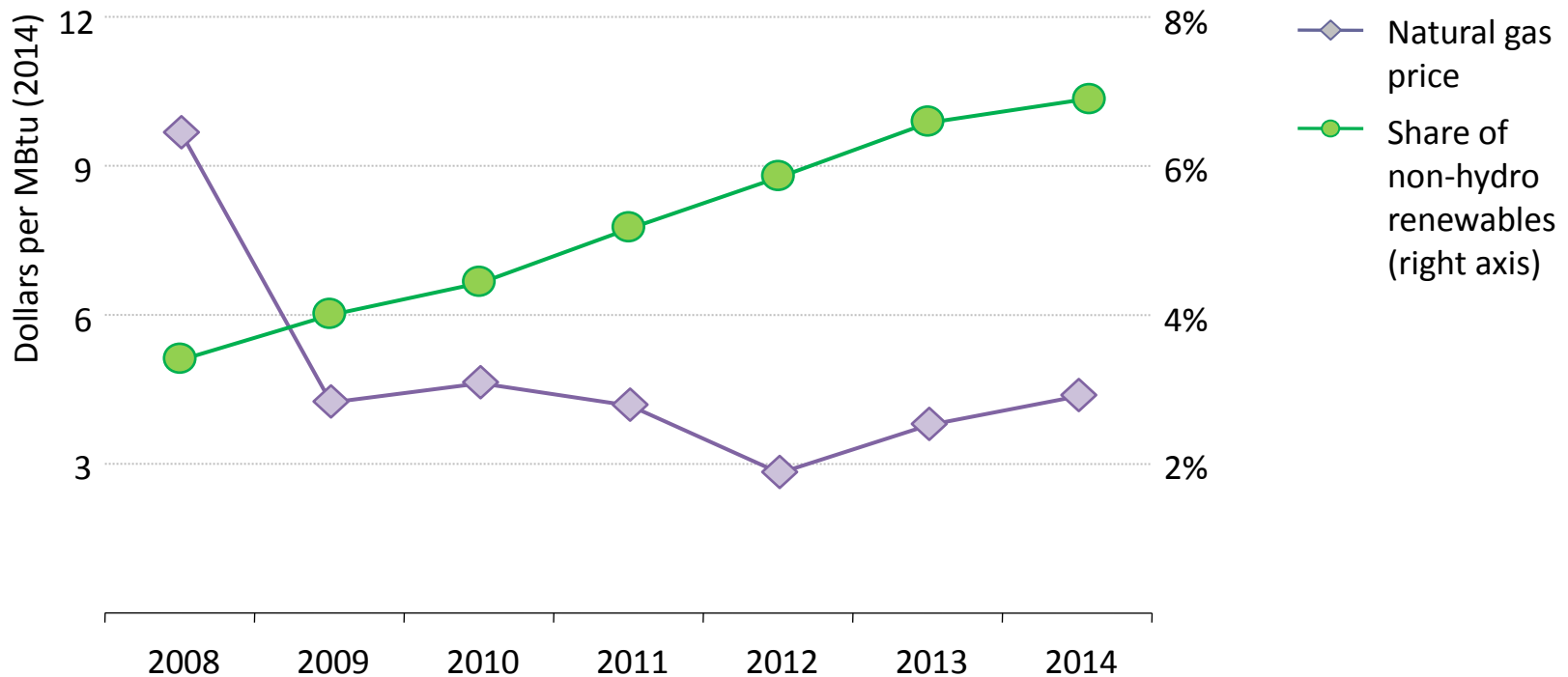
Change in cumulative global energy-related CO<sub>2</sub> emissions in the Low Oil Price Scenario relative to the New Policies Scenario, 2014-2040



***While coal use declines, the deployment of alternatives to oil in transport decreases, & 15% of energy efficiency improvements are lost, pushing overall emissions up***

# How do low prices affect renewables?

## Natural gas prices and the share of non-hydro renewables in the US power mix



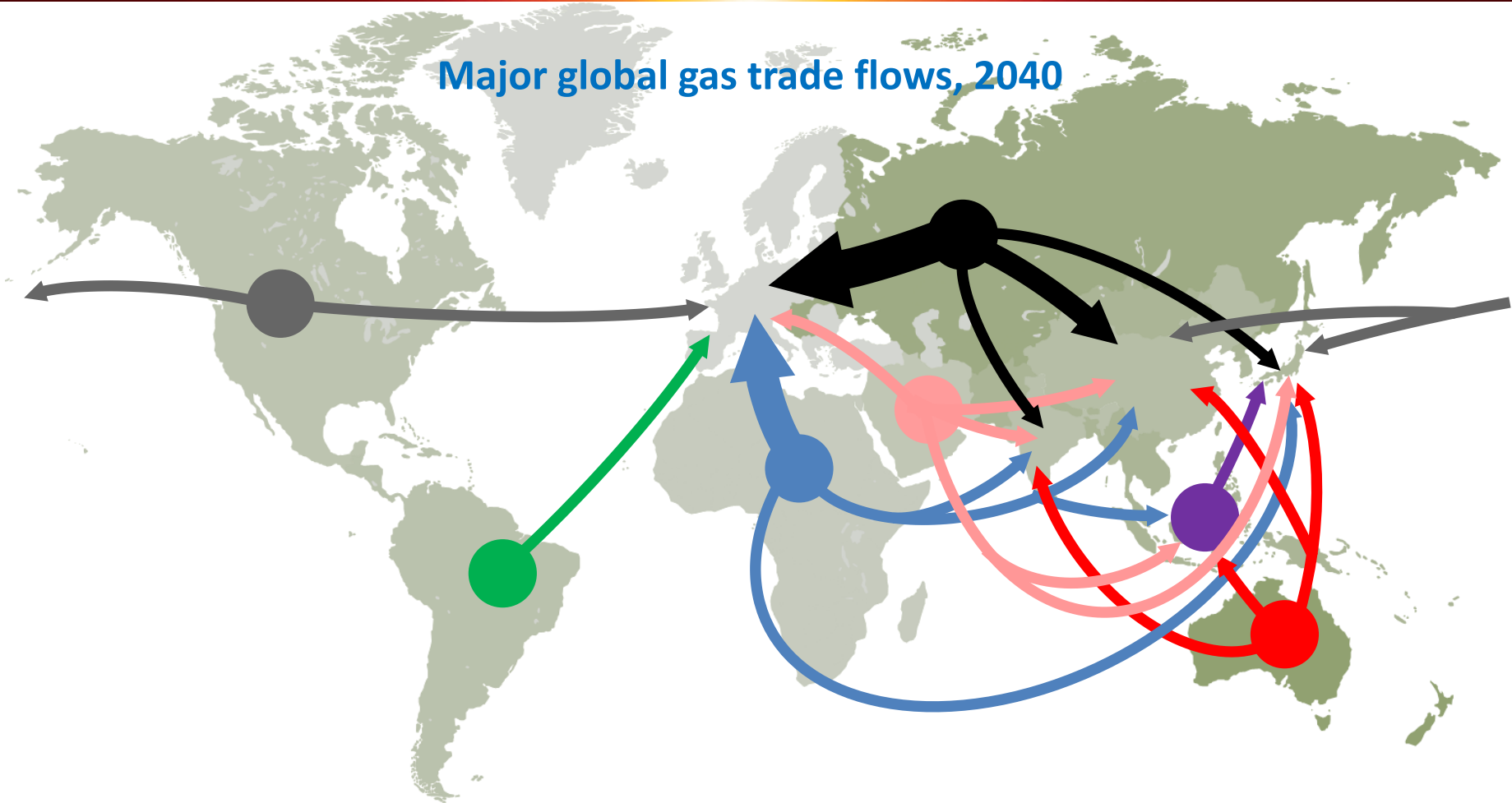
***Investment in renewables is based on subsidies (or similar). Low prices may make these subsidy schemes more costly but the incentives to invest remain***



# More integrated markets bring long-term gains for gas security

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Major global gas trade flows, 2040



*The increased volume & diversity of LNG trade offers new options & flexibility in an increasingly inter-connected global market*



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