

# Directions to 2050

## Revising the Clean Development Mechanism for a post-2012 world

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# Very demanding reductions are called for

Effective action requires:

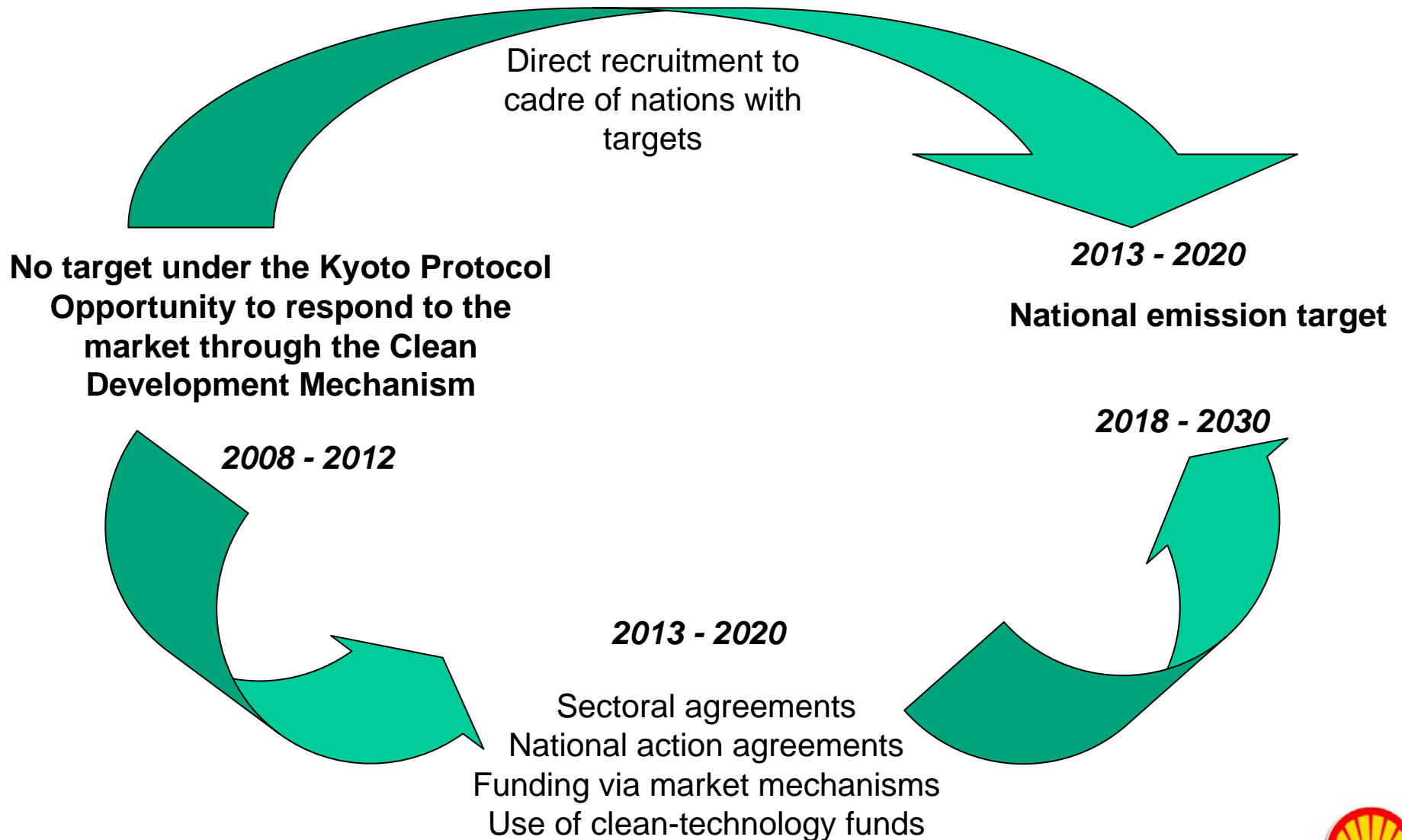
- Global emissions to fall by at least 50% relative to 1990 by 2050;
- Global average per capita emissions that will – as a matter of basic arithmetic – need to be around 2 tonnes (T) by 2050 (20 GT divided by 9 billion people): this figure is so low that there is little scope for any large group to depart significantly above or below it;
- Agreement by developed countries to take on immediate and binding national targets of **20% to 40% by 2020**, and to commit to reductions of **at least 80% by 2050**;

**Key Elements of a Global Deal**

**Nicholas Stern**



# Two pathways for developing countries



# Possible Post-Copenhagen Architecture

## Developing Country Action

### Sectoral “Satellite” Agreements

- clear purpose and end-point
- built on the foundation elements
- negotiated separately (by a limited number of parties)
- technology capacity building

**Clean  
Technology  
Funds**

**Supporting  
Mechanisms**

**Carbon  
Market  
Infra-  
structure**

**Measurable  
Reportable  
Verifiable**

**Adaptation  
Funding**

## Developed Country Action

## Developed Country Targets

## Long term goal

## Copenhagen Agreement



# Post-Copenhagen Architecture

Properly funded and executed agreements may lead to the respective sector adopting a target which supports the long term goal. Developing countries progressively take on targets through such sectoral based arrangements.

## Developing Country Action

### Sectoral Satellite Agreements

- clear purpose and end-point
- built on the foundation elements
- negotiated separately (by a limited number of parties)
- fixed scope and lifetime with clear objectives

Clean  
Technology  
Funds

Supporting  
Mechanisms

Carbon  
Market  
Infrastructure

Adaptation  
Funding

## Developed Country Action

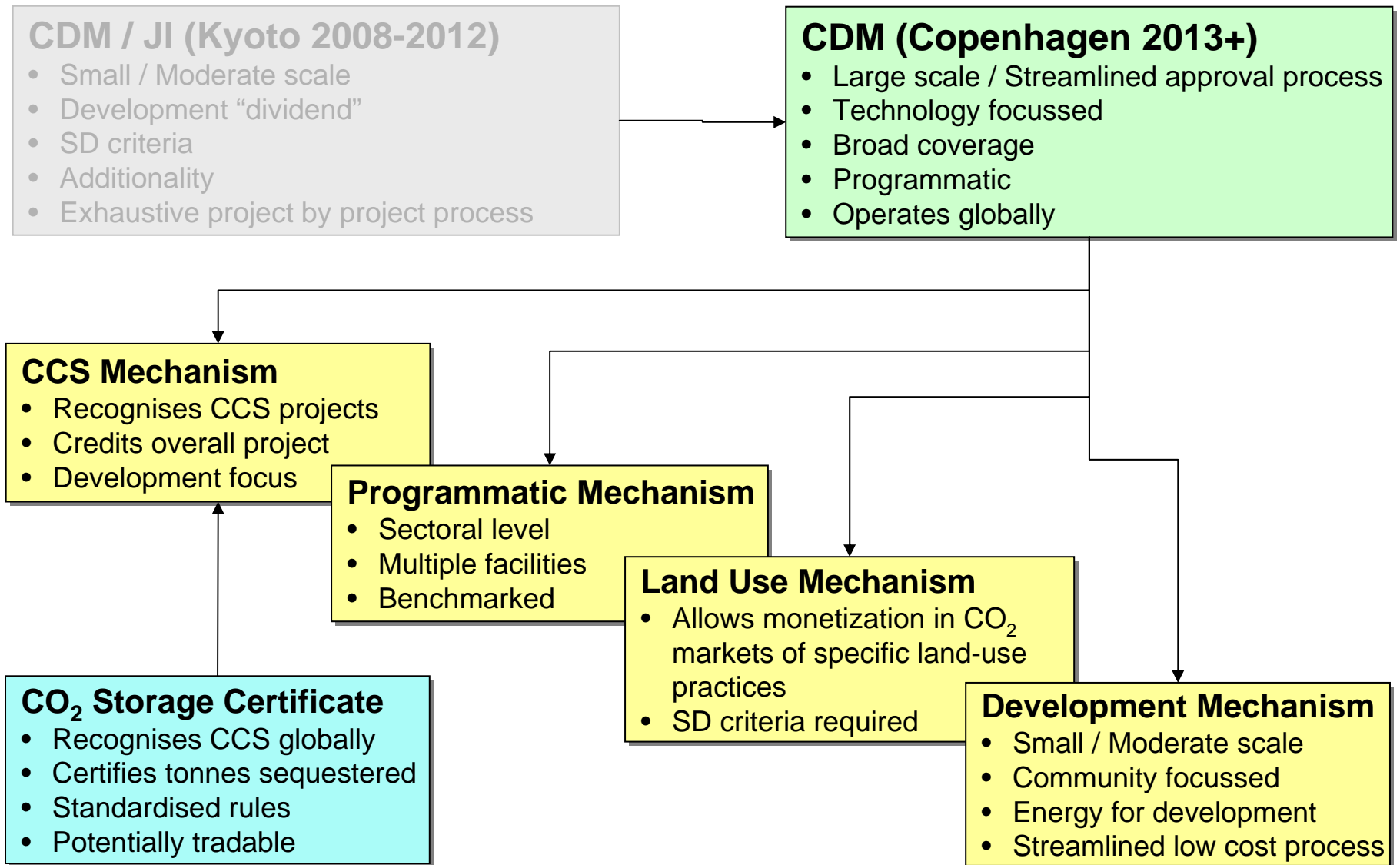
## Developed Country Targets

## Long term goal

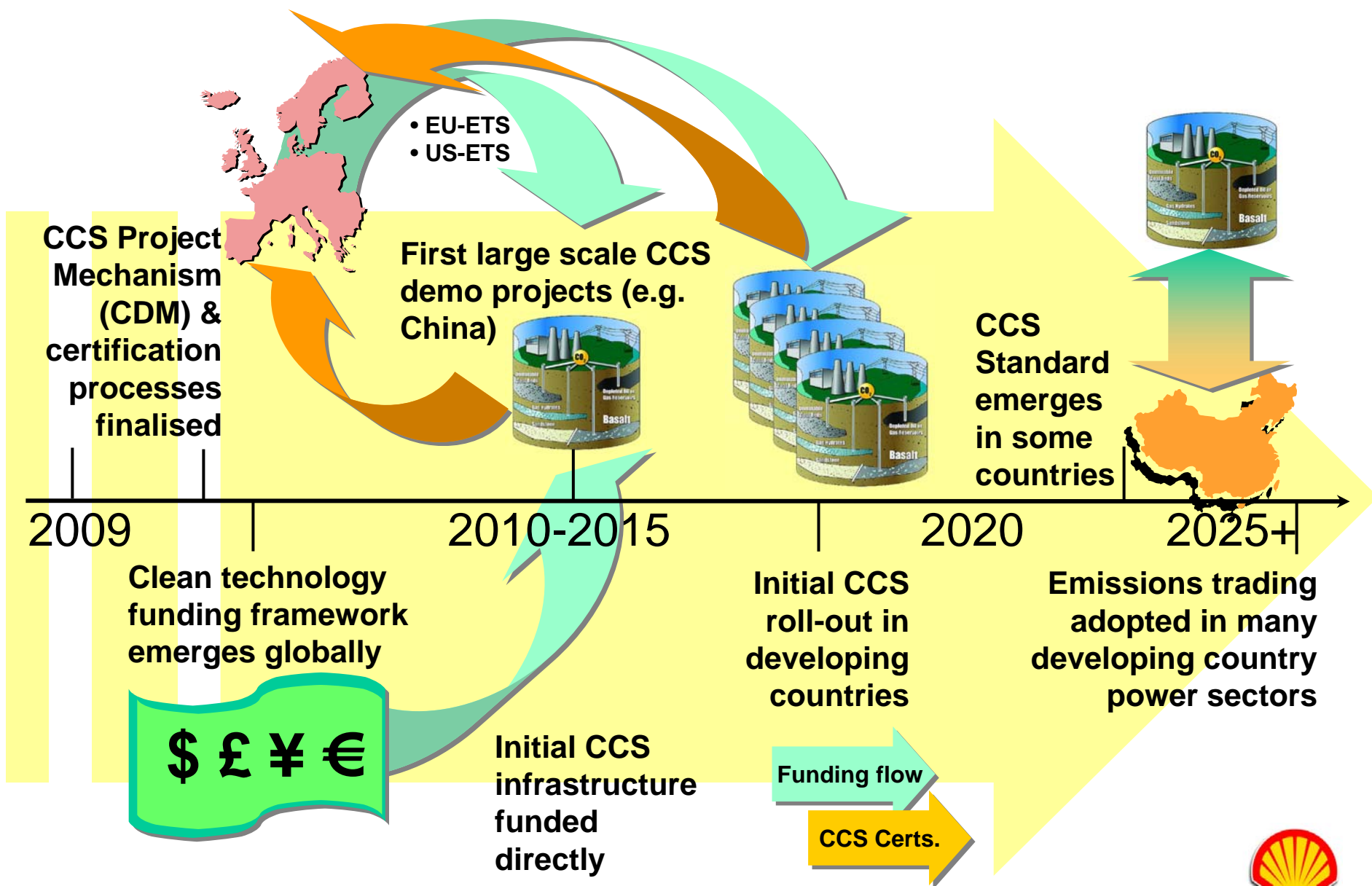
## Copenhagen Agreement



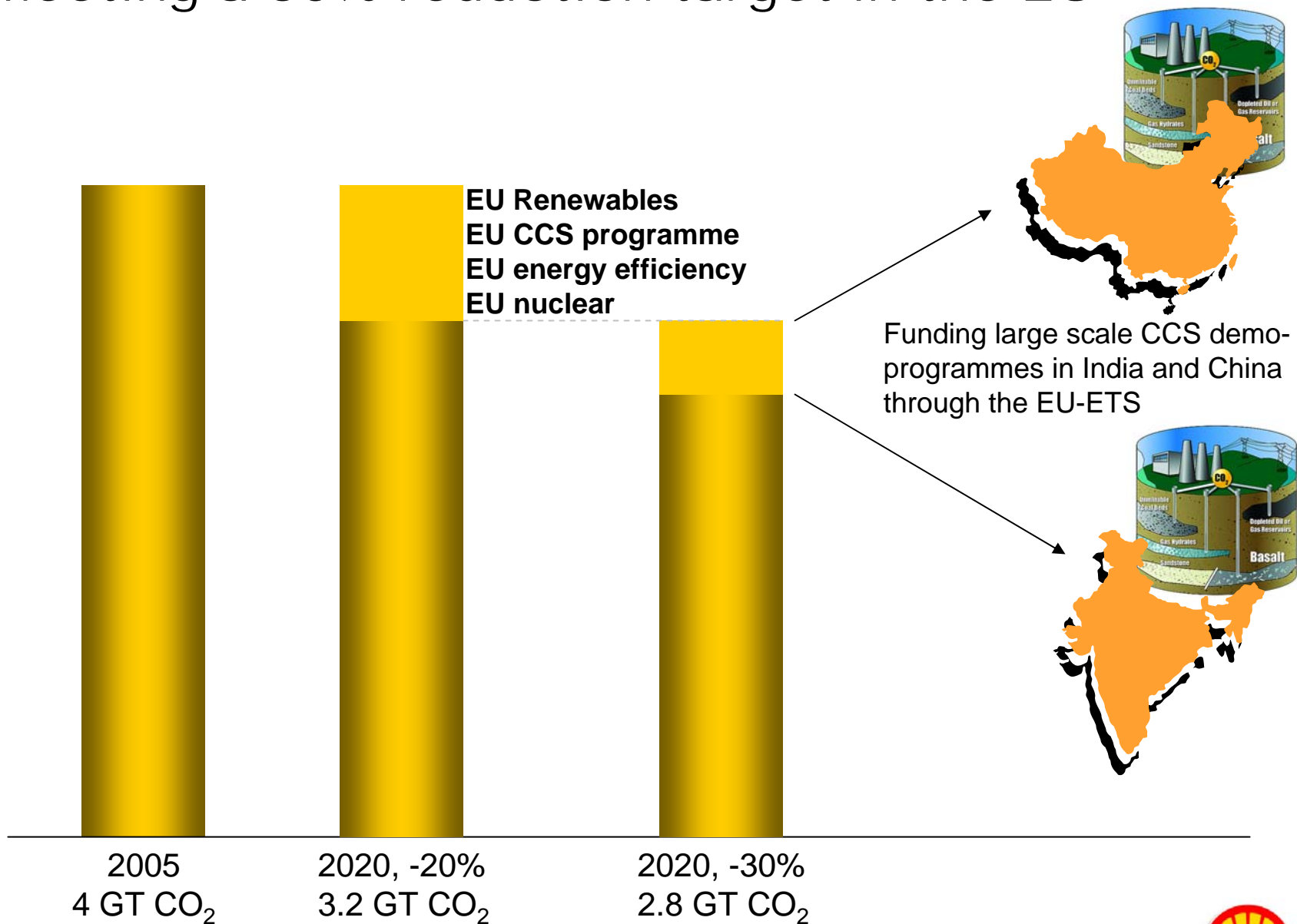
# An evolution in the supporting mechanisms



# Mechanisms supporting a “sectoral agreement”



# Meeting a 30% reduction target in the EU





# Key international elements going forward

## Key elements that need to be present in the near term:

- CCS recognised within the UNFCCC Clean Development Mechanism (CDM);
- International CCS certification, that delivers a (tradable) certificate for one tonne of CO<sub>2</sub> stored underground and supports the CDM;
- A funding framework for the demonstration phase of CCS, consisting of -
  - Recognition of CCS within existing and new clean technology funds (e.g. the fund recently proposed by the G8);
  - Recognition of extra-national CCS demonstration projects within national and regional funding arrangements e.g. EU CCS Demo funding amendment to the ETS Directive.



# Global CCS Certification

## CDM / JI (Kyoto 2008-2012)

- Small / Moderate scale
- Development “dividend”
- SD criteria
- Additionality
- Exhaustive project by project process

## CDM (Copenhagen 2013+)

- Large scale / Streamlined approval process
- Technology focussed
- Broad coverage
- Programmatic
- Operates globally

### CCS Mechanism

- Recognises CCS projects
- Credits overall project
- Development focus

### CO<sub>2</sub> Storage Certificate

- Recognises CCS globally
- Certifies tonnes sequestered
- Standardised rules
- Potentially tradable

Need to find a home for this  
– e.g. Australian CCS Institute

### Programmatic Mechanism

- ....
- ....
- ....
- ....

### Land Use Mechanism

- ....
- ....
- ....
- ....

### Development Mechanism

- ....
- ....
- ....
- ....



# A post-2012 Clean Development Mechanism

- Operates on a large scale
- Supports a real transition for developing countries
- Scale must be linked with capacity in cap-and-trade systems (or other outlets, e.g. purchasing programmes)

i.e. Sufficient buyers of CERs

- Recognises new mitigation pathways and technologies

e.g. Carbon capture and storage  
Land use



