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The role of natural gas in the transition to achieving  
sustainable energy for all in Africa

16 July 2016

PRESENTATION

Energy Challenge for Africa

By

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# THE ROLE OF GAS IN THE TRANSITION TO SUSTAINABLE ENERGY FOR ALL IN AFRICA

UNCTAD – Nairobi – 17 July 2016

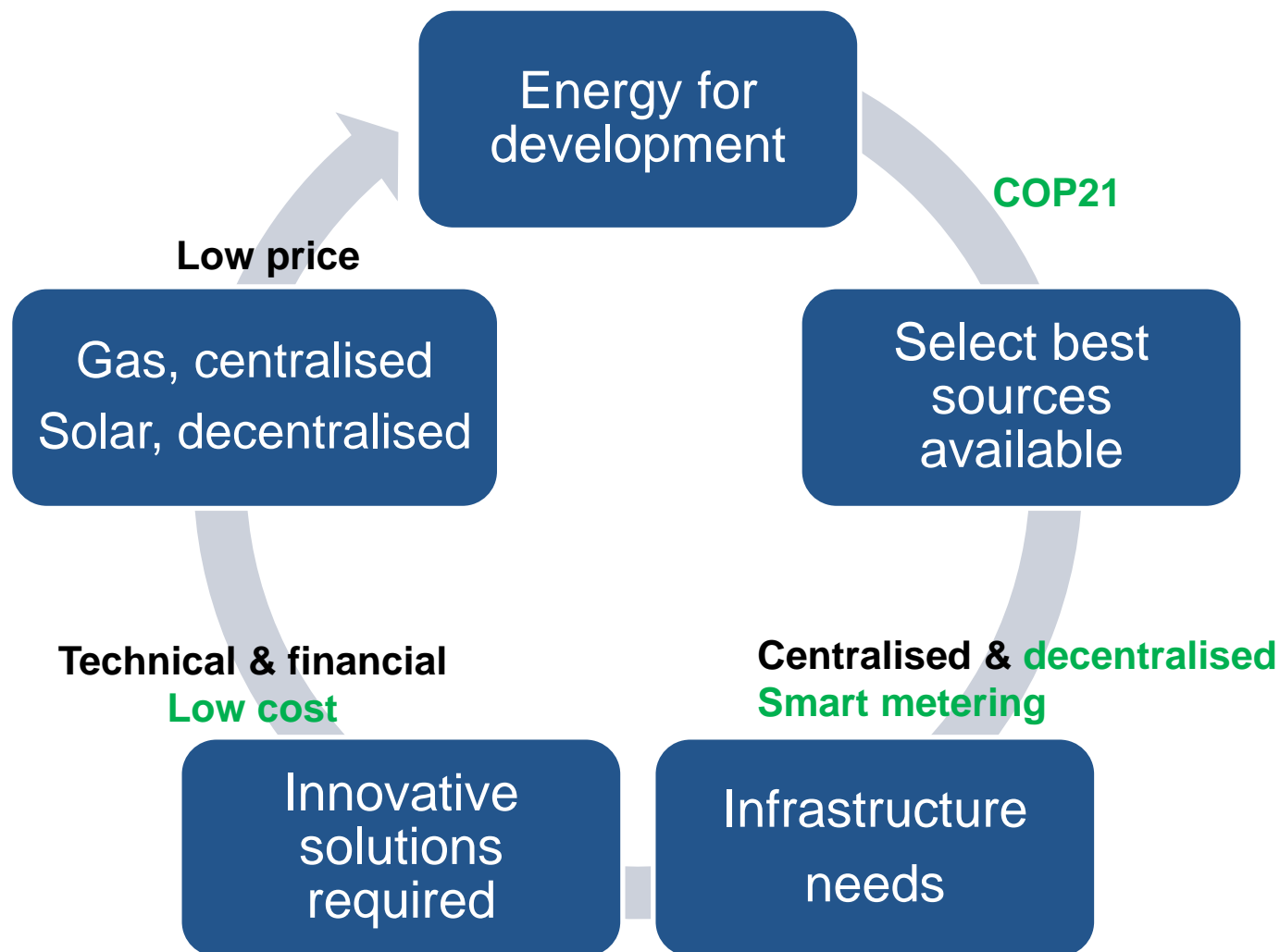
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# ENERGY CHALLENGE FOR AFRICA



## 5 ENERGY REVOLUTIONS IN THE LAST 10 YEARS

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**Shale Gas**

- Started in the US in 2005

**Shale Oil**

- Ongoing in the US

**Efficiency**

- Started in Europe in 2006

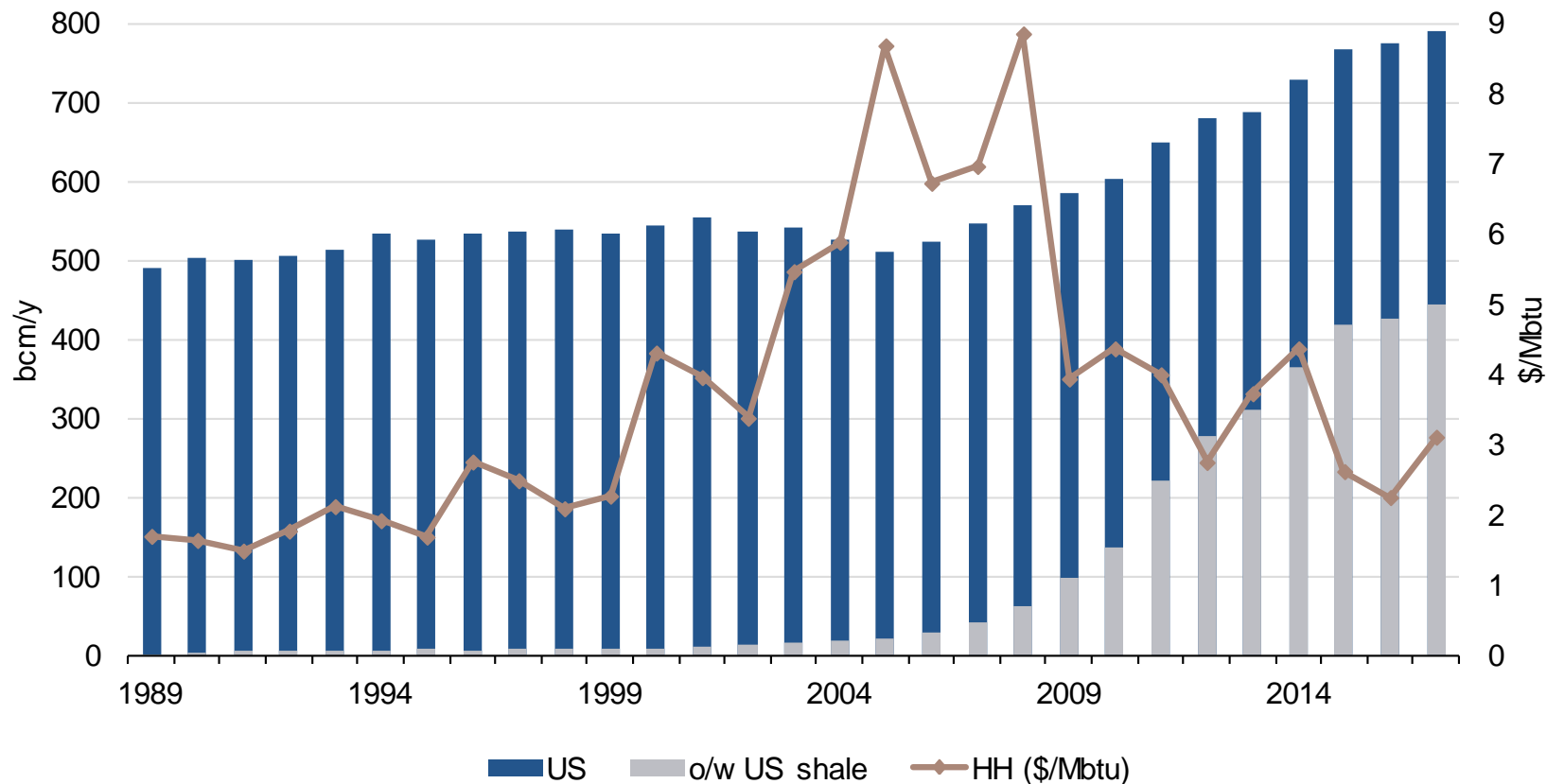
**Renewable**

- Started in Europe, now worldwide

**Storage**

- Jury still out

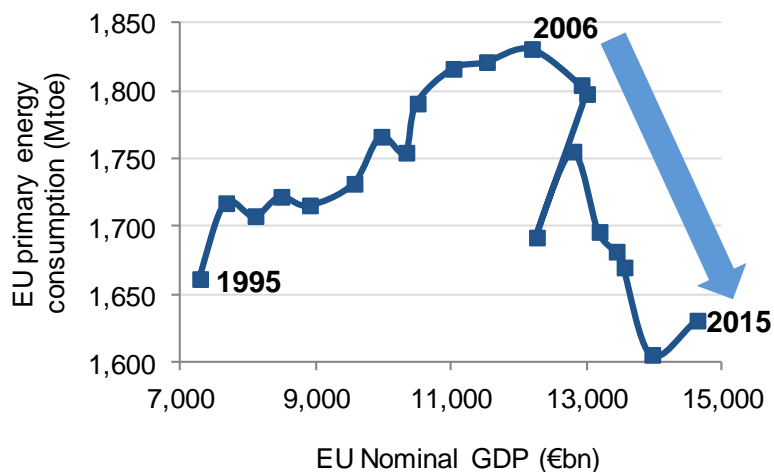
# US GAS PRODUCTION: UP SINCE 2005 THANKS TO SHALE



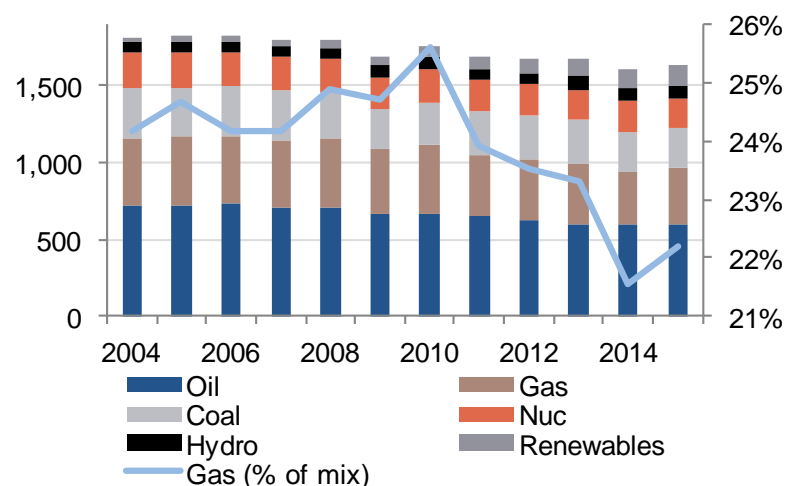
Source: SG Cross Asset Research/Commodities, BP Statistical Review, US DoE

# EUROPE: NO DEMAND GROWTH THANKS TO EFFICIENCY

**EU primary energy consumption  
down by 10.9% since 2006**



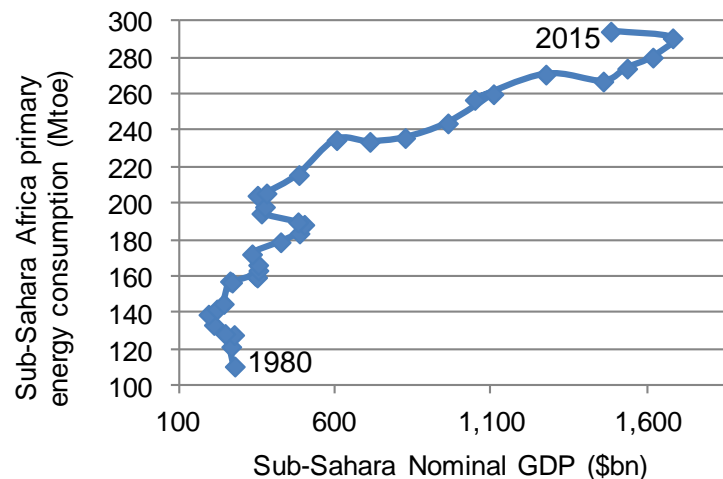
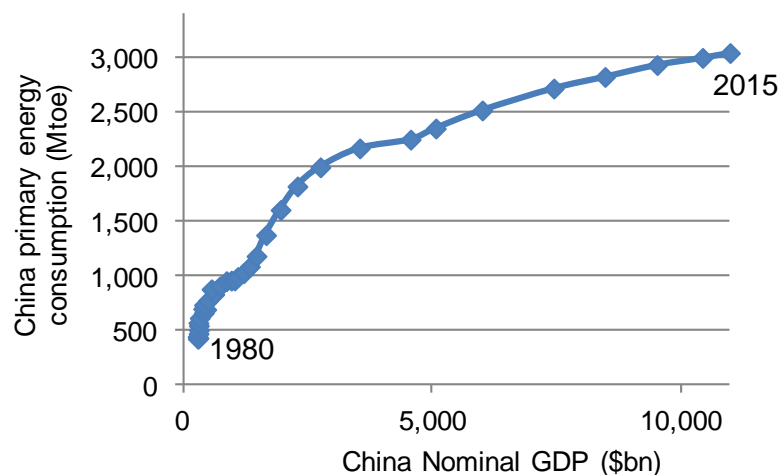
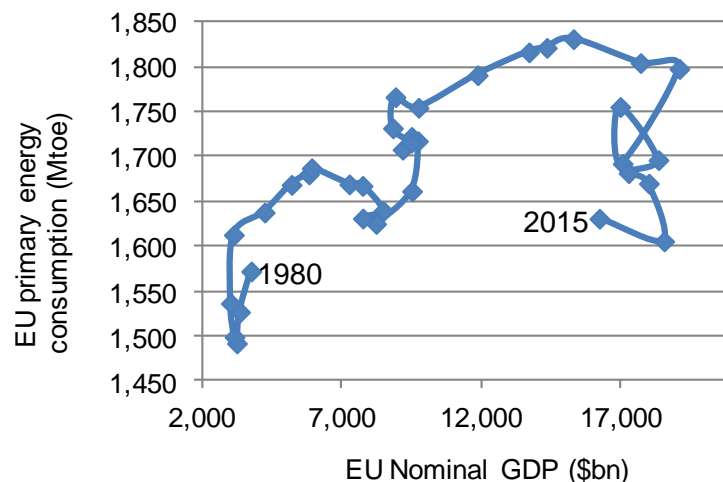
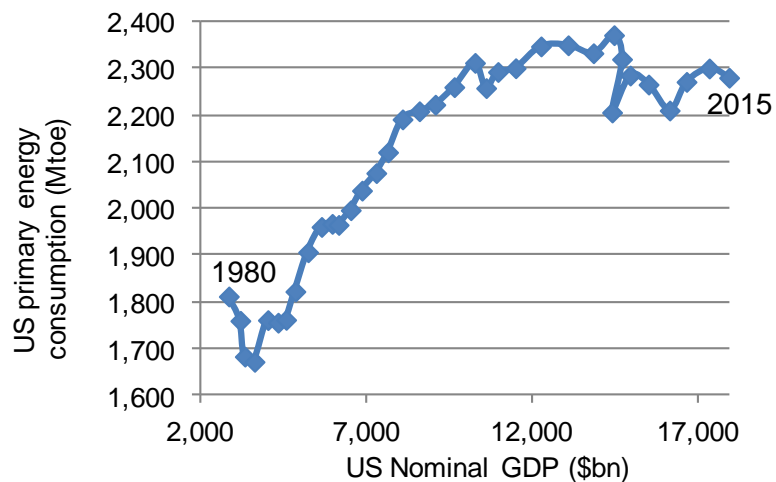
**European gas demand  
down by 18.3% since 2006**



**On top of the structural decline, tense EU-Russia relations  
will not favour gas**

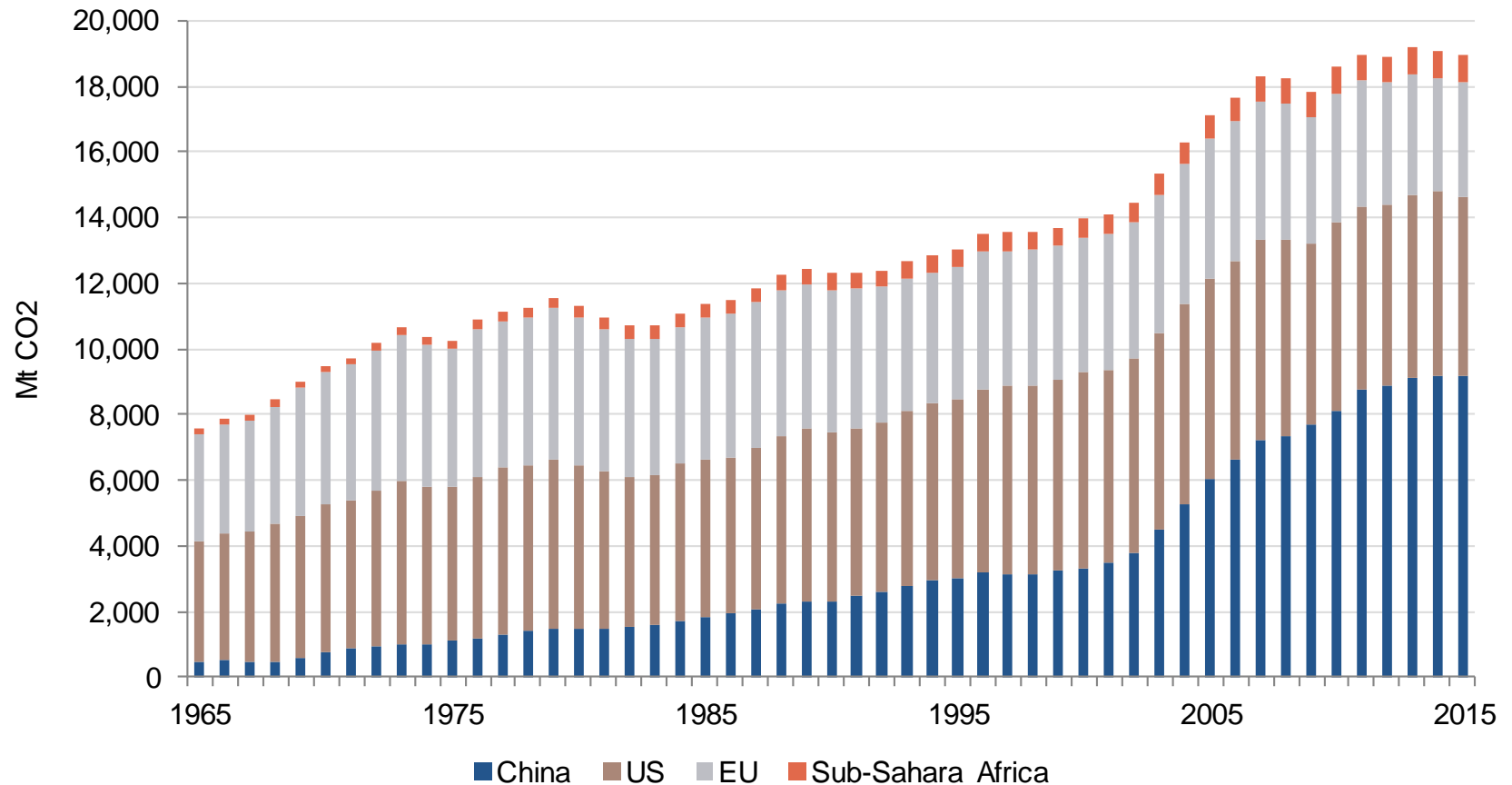
Source: SG Cross Asset Research/Commodities, BP Statistical Review, Eurostat, IEA

# PRIMARY ENERGY CONSUMPTION VS \$GDP (1980-2015)



Source: SG Cross Asset Research/Commodities, BP Statistical Review, IMF

# AFRICA COMES ON THE ENERGY SCENE AFTER COP21

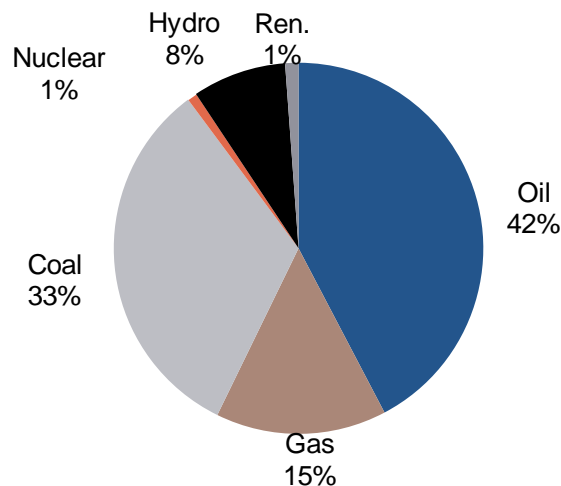


Source: BP Statistical Review

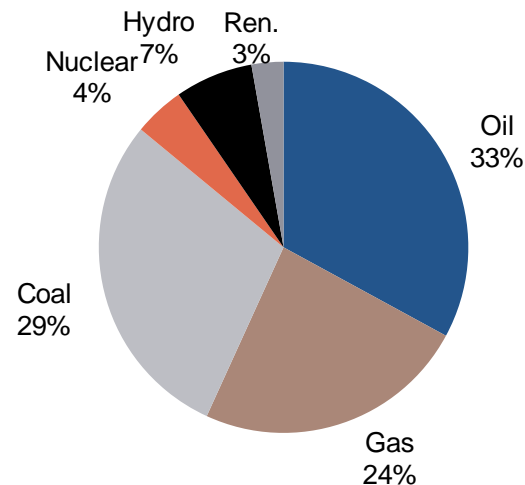


# 2015 ENERGY MIX WITH COAL RUNNING OUT OF FRIENDS

## Sub-Saharan Africa



## World



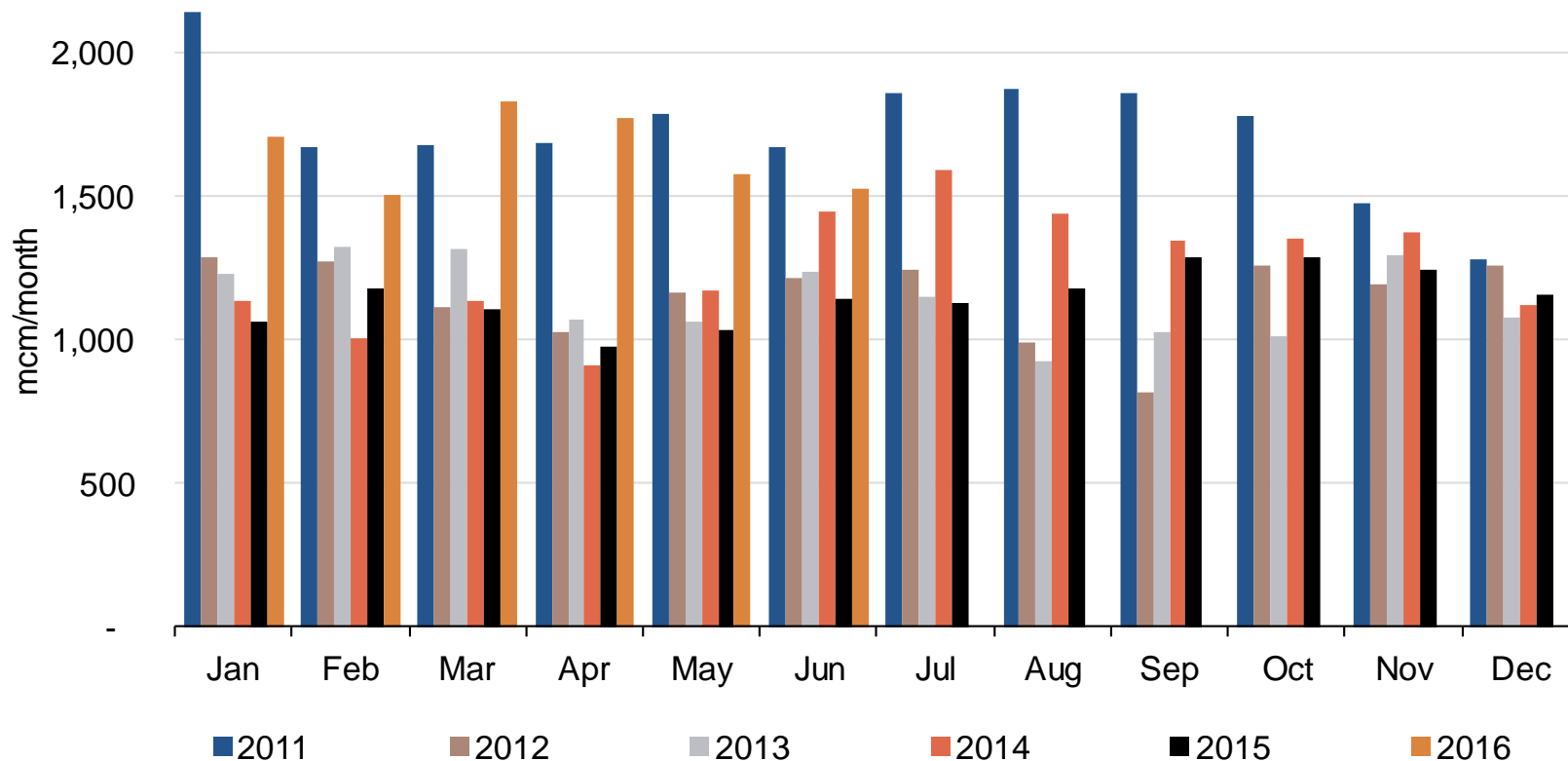
**Sub-Saharan Africa accounts for 2.2% of world energy consumption  
It needs to massively increase renewable and gas in terms of  
volume and % of the mix**

**Renewable & gas are available  
It's the perfect match**

Source: BP Statistical Review 2016

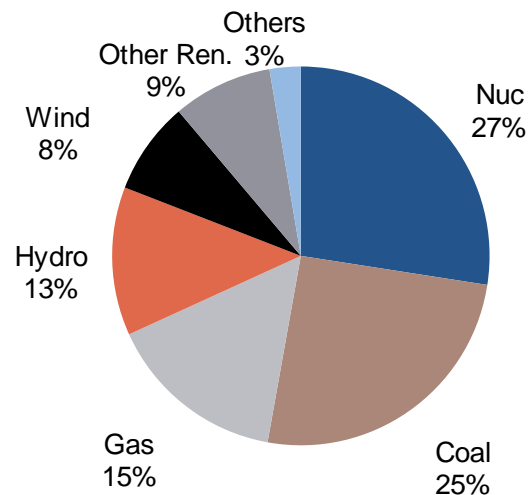
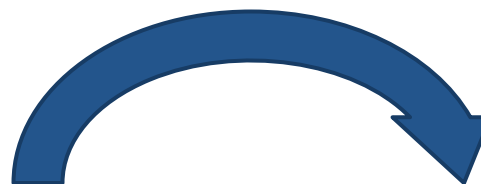
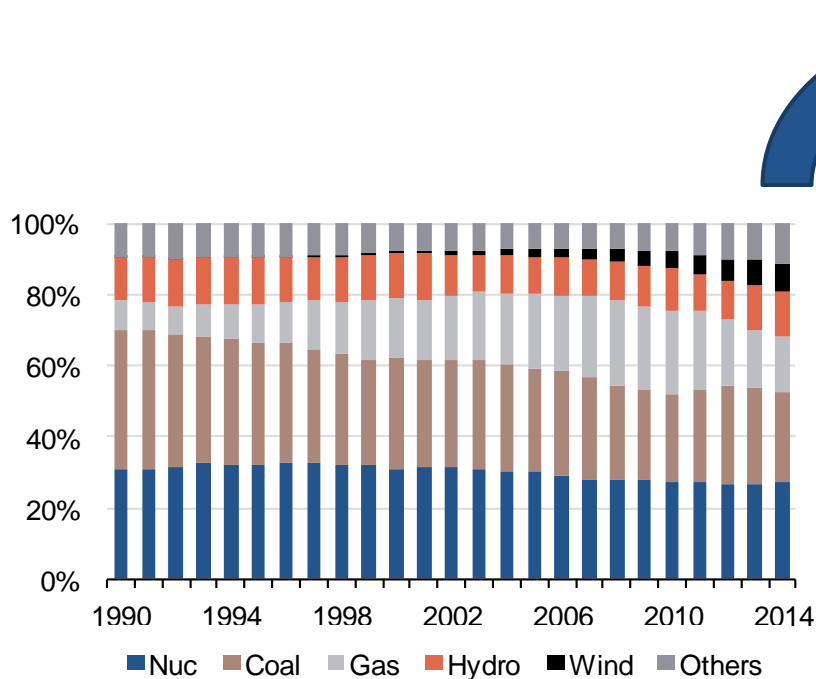
# GAS FOR UK POWER GENERATION

After the 89% increase in the carbon price support in April 2015, it took seven months for gas for power generation to grow yoy



Source: SG Cross Asset Research/Commodities

# GAS FOR EUROPEAN POWER GENERATION?



**A 1% switch from coal to gas in EU power generation increases gas demand by c.6bcm**

Source: SG Cross Asset Research, Eurostat

## IMPLICATIONS & CHALLENGES FOR AFRICA

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Gas

- Fast monetisation of gas reserves?

Efficiency

- Follow up

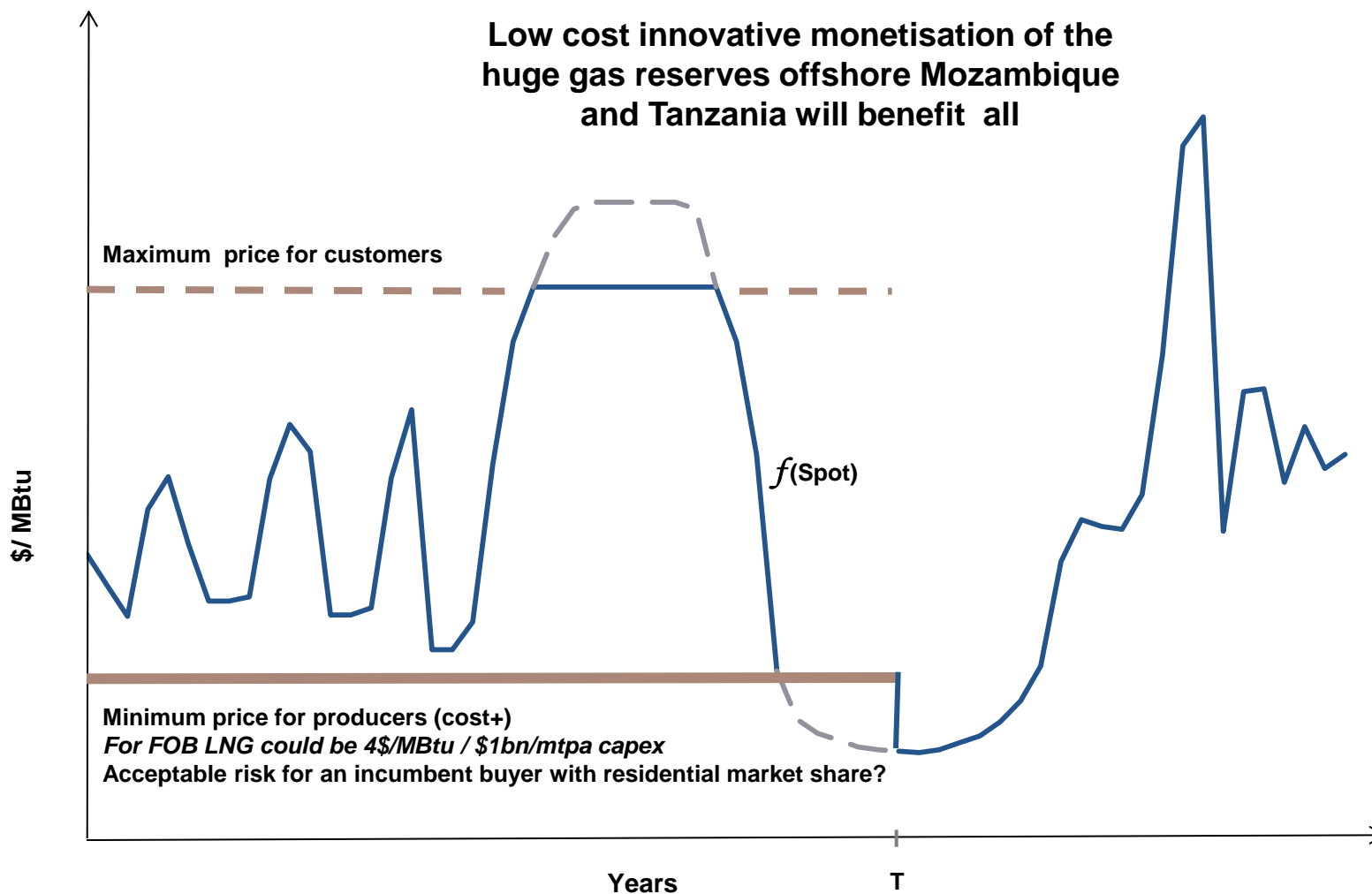
Renewable

- Huge potential (decentralised & low cost)

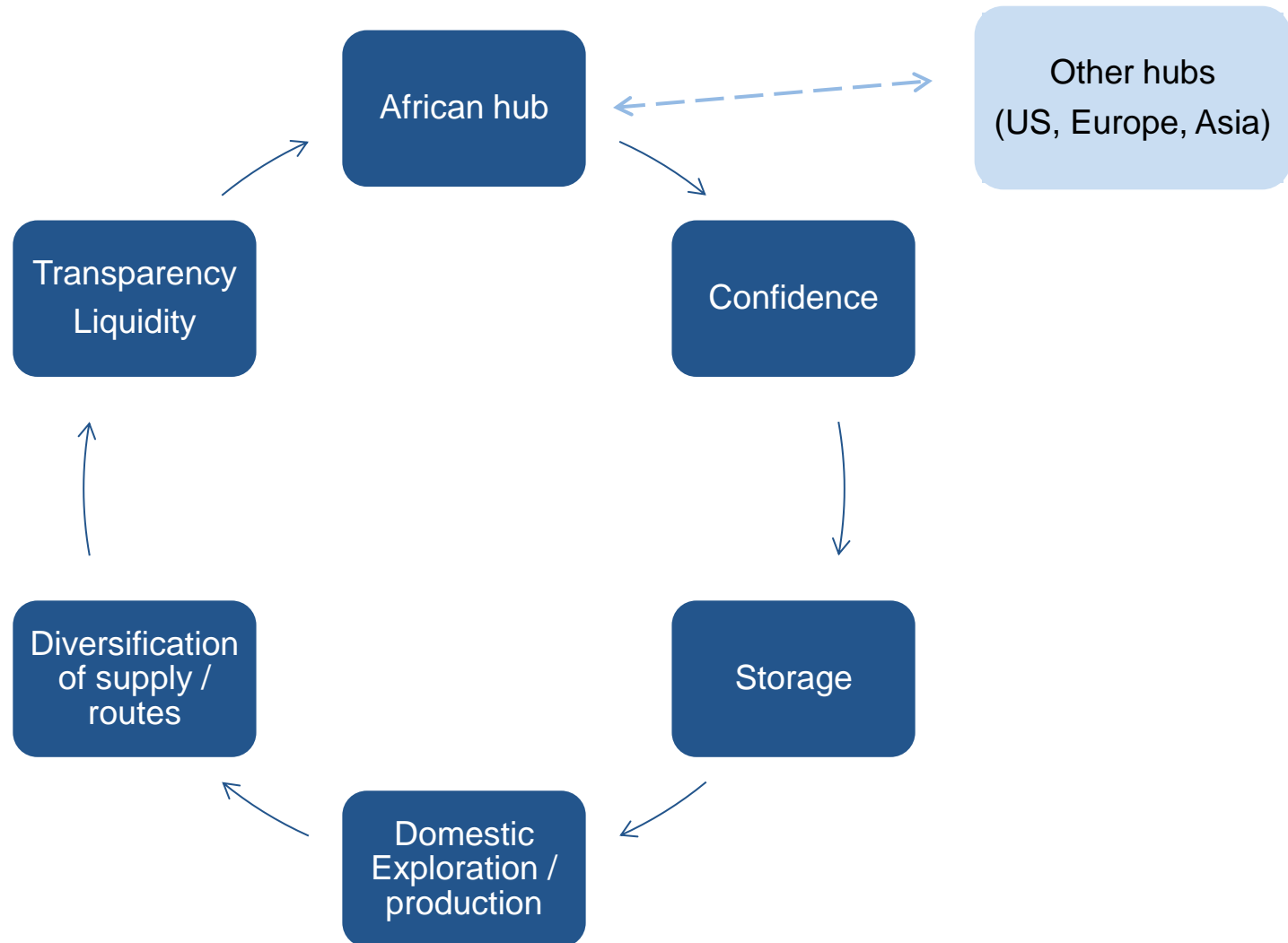
Storage

- Could allow for a resilient decentralised energy system

# INNOVATIVE SOLUTIONS TO FAST-TRACK GAS INDUSTRY



# FOR AFRICA TO BECOME A REGIONAL GAS HUB



Source: SG Cross Asset Research

# APPENDIX – DISCLAIMER

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