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TRANS SAHARAN GAS PIPELINE

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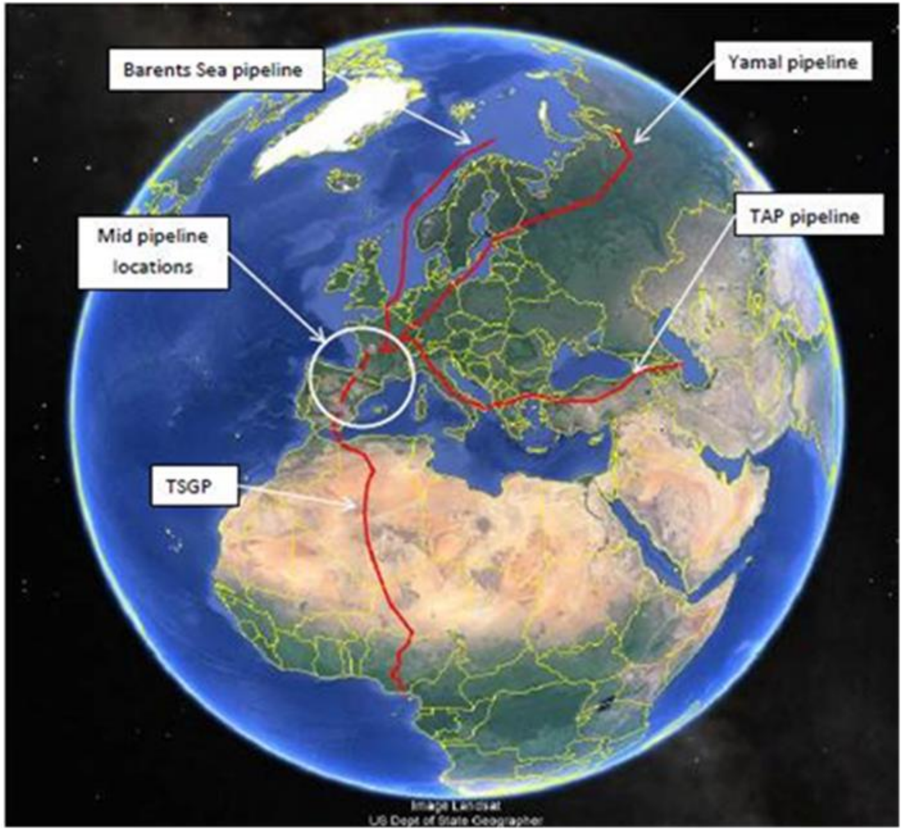
WGCPARIS2015
WORLD GAS CONFERENCE

Trans Saharan Gas Pipeline – from Nigeria to Europe

- Calabar in Nigeria to Beni-Saf in Algeria
- 48” outside diameter, 100 bar
- Capacity 20bcm/year
- Length: 4181 km
  – 1037 km in Nigeria
  – 841 km in Niger
  – 2303 km in Algeria

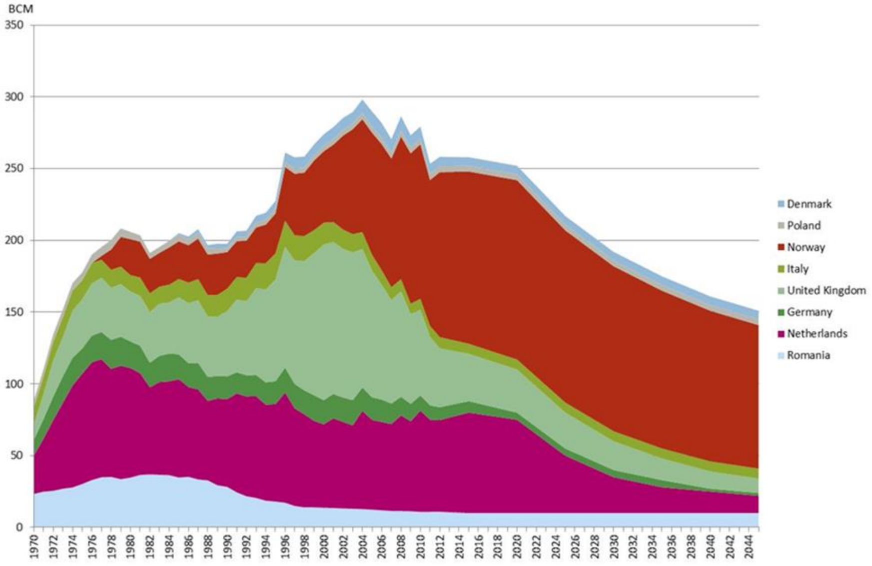
TSGP – Competing with pipelines and LNG

- Shortest pipeline route to Spain
- Shortcut from West Africa compared to LNG transport
- First long-distance pipeline from West Africa to Europe



EU gas production decline – increased import need

- Decline in EU production from 250 bcm today to 150 bcm per year
- Gas demand up in many scenarios as the economy recovers – uncertainty
- Target market: Spain, Portugal, Italy, France largest potential - rebound



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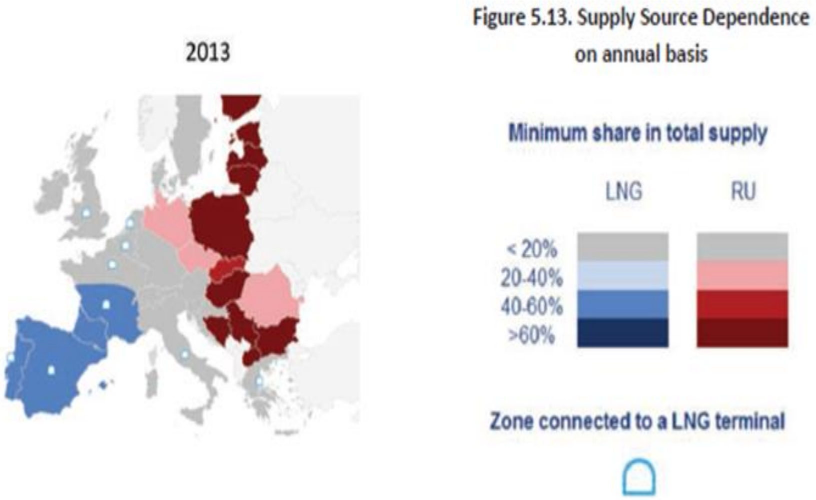
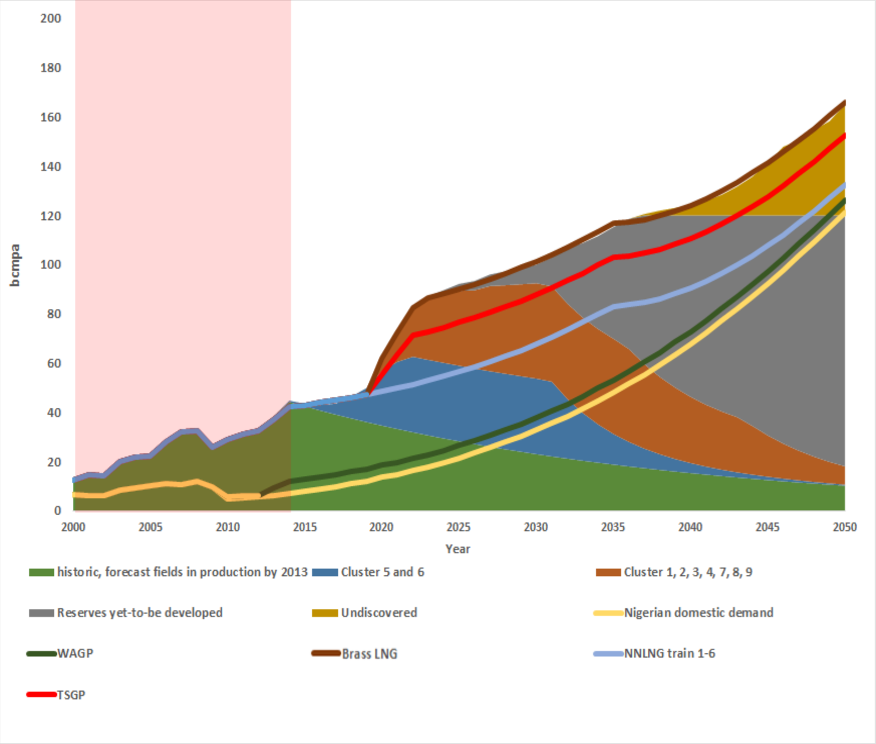
Security of gas supply to South West Europe

- South-West Europe: Depends on LNG supply
- Eastern Europe: Depends on Russia
- Iberian peninsula: Weakly connected to rest of EU
- LNG supply may be diverted South-West Europe vulnerable to LNG supply crises



Gas supply Nigeria – gas reserves sufficient for TSGP

- 5200 bcm gas reserves in Nigeria, TSGP needs 600 bcm
- LNG to go ahead in parallel
- Indigenous demand may grow rapidly - first priority together with existing LNG
- Algeria not supplying TSGP – shale gas on long term



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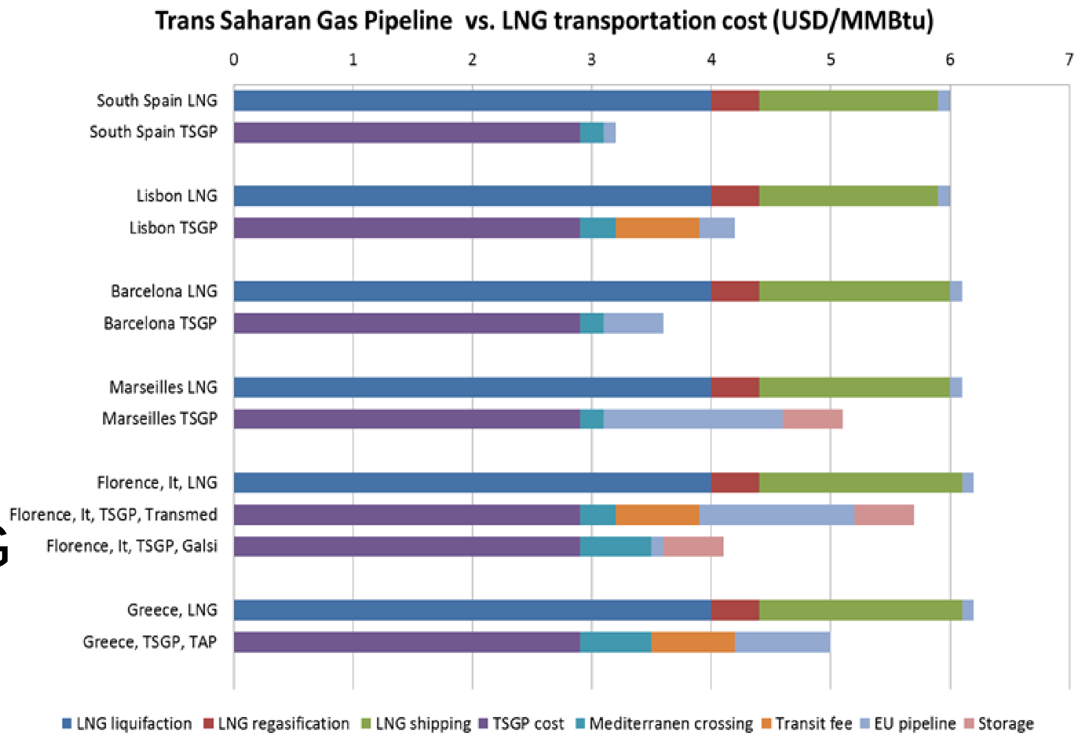
TSGP supply cost to Europe lower than LNG

- TSGP transport cost to South Europe lower than LNG transport cost from Nigeria
- TSGP target will be South West Europe
- Overall economy depends on global LNG prices



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Risk, conclusions and next steps

- Political risk mitigation
- Gas market of more than 20 bcm/year and SoS
- Sufficient gas reserves and supply available
- Integration with existing and planned network developments in Nigeria and Algeria