

Challenges and best practices on the minimisation of flaring emissions

- **Challenges:**

- Unlike liquids, gas instabilities cannot be absorbed within storage or feed tanks, making the balancing of the gas plant a challenge that results in flaring of gases.
- Currently there are no flow meters or analysers installed on any flare line to accurately define the flow and composition of the gases on the flares.

- **Best practices:**

- Operational optimization
- Improvement of plant stability
- Recovery of valuable streams
- The cost-effective re-use of key high heating-value streams in the fuel gas system



In line with commitment to reduce GHG emissions and continuous improvement.

- **Sasol's initiatives that are in the pipeline:**

- Installation of flow meter for one flare system complete, but calibration needs to be done – only opportunity when system is on shutdown
- Reduction of refinery flare streams ongoing
- Procurement of flying lab to determine the impact of flaring

Flaring is the only technology that can safely manage the requirement to instantaneously accommodate significant variability in load and composition, while minimizing the environmental impact.

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- **Challenges:**

- Transition to a low carbon future
- Pressure to reduce GHG footprint sooner
- Strict environmental standards
- Declining product prices and ageing equipment
- Implementation of carbon tax effective 1 June 2019

- **Best practices:**

- Environmental, Social and Governance (ESG) Investing
- Rise of Renewables
- Reduce greenhouse gas (GHG) footprints in line with the Paris agreement i.e. global climate change agreement
- Carbon offsets initiatives
- Fine coal beneficiation (removing Sulphur from the coal feeding the boilers)
- Compliance to minimum emissions standards (MES) by 1 April 2025