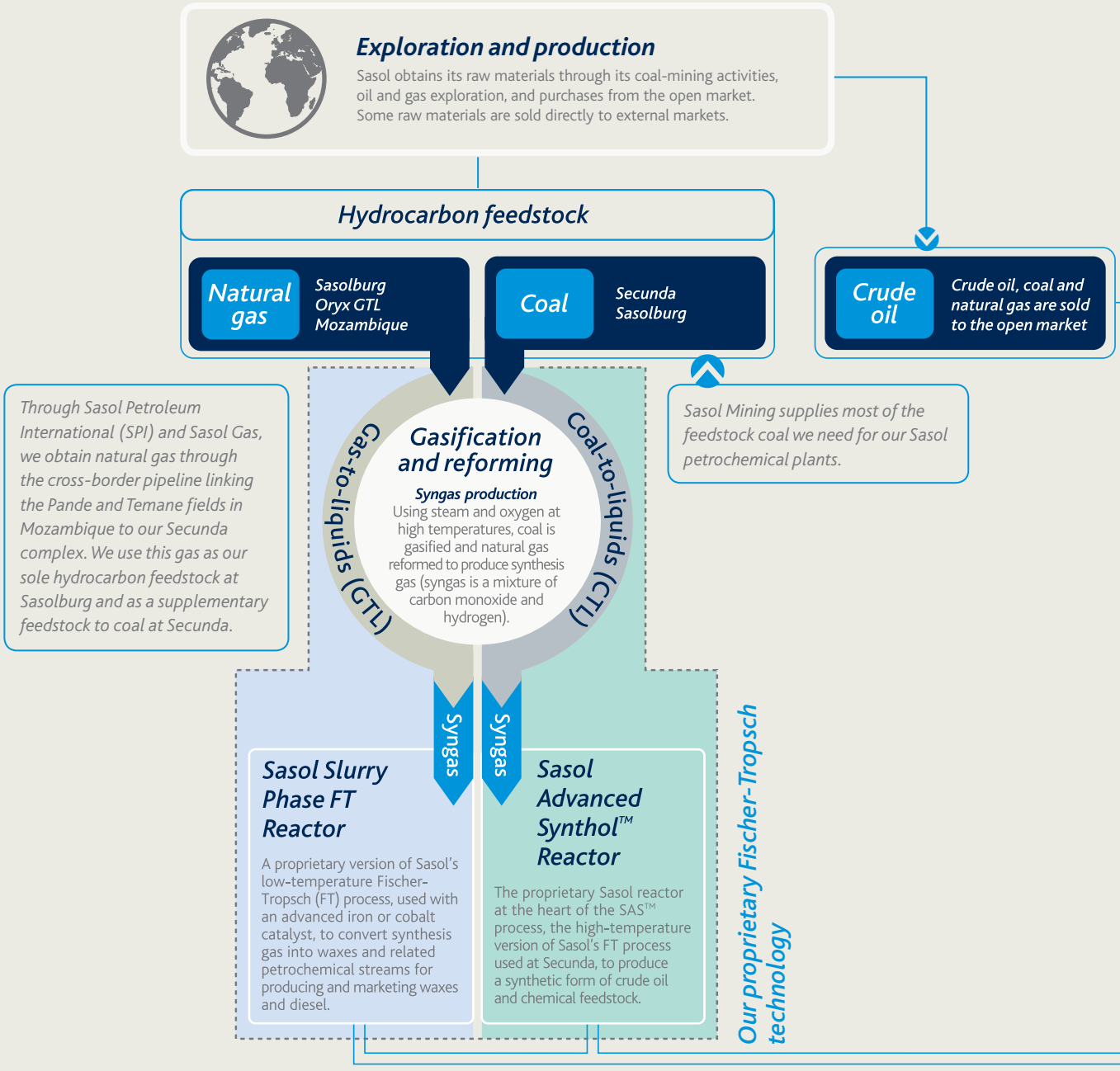
our integrated business model



Greenhouse gas (GHG) emissions

Coal is an important part of the world's energy mix, and Sasol will continue to produce transportation fuels from coal and gas. However, we are committed to substantially reducing our carbon emissions by, among others, developing more efficient production processes and investigating carbon capture and storage (CSS) solutions. We have set several targets to reduce our greenhouse gas emissions intensity by 15% (on the 2005 baseline) in all our operations by 2020, and we have spent R100 million (US$11,1 million) in 2009 on energy efficiency-related projects, which should achieve a reduction of around 760 000 tons of GHG emissions a year.

Our global emissions of GHG, which have been independently verified, increased from 71,3 million tons (Mt) in 2009 to 75,8 Mt in 2010, mainly due to the inclusion of Oryx GTL emissions data. However, our emissions intensity improved to 3,05 (measured as carbon dioxide equivalent per ton of production) in 2010. This compares with 3,24 in 2009 and 3,02 (restated) in 2008. The improved overall GHG intensity is a result of the inclusion of Oryx GTL, and Sasol Polymers and Sasol Synfuels significantly increasing production volumes, which offset the emissions increase. The targets we have set for all our operations reflect not only our desire to be a responsible company, but also our awareness that a strong business case exists for sustainable development.

and to exceed targeted rates of return in a sustainable manner.

Innovation

In downstream chemical process technology, we have developed several proprietary processes for recovering and processing a range of solvents, waxes and phenolics for the world market, as well as 1-pentene, 1-hexene, 1-heptene, 1-octene and higher alpha olefins, the last of which we convert into Safol™ H($C_{12,13}$) alcohols. We have developed and patented several base-metal catalysts for our FT synthesis processes.

We have also been innovative in coal exploration and mining, where Sasol Mining (sometimes in partnership with technology suppliers) has developed high-extraction mining methods, advanced directional drilling techniques, roof-bolting systems, continuous-miner systems and a virtual-reality training system for continuous-miner operators, among other cost-saving innovations.

Research

Besides the research and development and new-product formulation and testing work we do at Sasolburg through Sasol Technology's fuel research group, we conduct further fundamental research at the Sasol Advanced Fuels Laboratory (SAFL), in collaboration with the University of Cape Town, and the Sasol Fuels Application Centre (SFAC). SFAC enables us to conduct sea-level engine and fuel research and tests in line with international trends.

Crude oil as feedstock

Our GTL diesel has a higher quality than diesels derived from crude oil. GTL diesel has a high cetane number (70+ versus the conventional 45 – 55), low sulphur (less than five parts per million), low aromatics (less than 1%) and excellent cold-flow characteristics. Our GTL diesel, therefore, is ideal as a low-emissions, premium grade fuel and as a blend stock for upgrading conventional diesels.

Markets

Sasol markets products directly to the consumer, as well as to commercial and industrial customers, thereby integrating its upstream and downstream activities.

Fuel components

Refine and blend

Fuel products
In the liquid fuels business, synthetic fuels components are upgraded and marketed together with conventional fuels produced in a refinery from crude oil.

Co-products

Coal gasification and the FT process produce co-products for recovery and beneficiation. These include ammonia, fertilisers, explosives, crude tar acids and sulphur.

Chemical building blocks

Chemical process

Chemical products
Chemical intermediates from the FT process are separated, purified and, together with conventional chemical raw materials, converted into a range of final products such as polymers, solvents, olefins and surfactants and waxes.

Water

Various technological advancements in effluent recycling, cooling, pre-treatment of water for steam generation and solids handling are paving the way for significantly improved zero liquid effluent discharge designs, which are being developed irrespective of water availability or pricing.

New energy

Sasol New Energy Holdings (SNE) was created to focus on new technologies that can be integrated with our core technologies to reduce our GHG footprint. As part of our commitment to reduce production of carbon dioxide in our operations and integrate new technology into our FT processes, SNE will look into renewable and lower-carbon energy options such as solar, biofuels and biomass, as well as nuclear, hydro and natural gas.