3 SUMMARY OF PROJECT COMPONENTS

The Project Components are currently made up of the QGC Components and the Ancillary Components.

3.1 PROJECT COMPONENTS

QGC will develop five principal Components as part of the Queensland Curtis LNG (QCLNG) Project in an area spanning some 500 km and five local government areas. These five principal Components are:

- **Gas Field Component:** the expansion of QGC's coal seam gas (CSG) operations in the Surat Basin. The Gas Field Component comprises:
  - Approximately 6,000 gas production wells over the life of the project with initially 1,000 to 1,500 wells across the Gas Field by mid-2014. The remaining wells will be phased in over the life of the project (20 to 30 years) to replace declining wells
  - gas- and water-gathering systems and gas processing and compression infrastructure
  - associated surface equipment, such as wellhead separators, telemetry devices and metering stations
  - field infrastructure such as access tracks, warehouses, camps (both construction and operations), office and telecommunications
  - the management of Associated Water produced in the CSG extraction process on the petroleum tenements. Water transported off the petroleum tenements for beneficial use, as defined by the *Water Act 2000* (Qld), is not discussed in this Environmental Impact Statement (EIS).
- **Pipeline Component:** development, construction, operation and decommissioning of a gas pipeline network of approximately 730 km to link the Gas Field Component and other nearby CSG resources to the LNG Facility. The pipeline network includes:
  - a 380 km Export Pipeline from QGC's Gas Field in the Surat Basin to the LNG Facility in Gladstone
  - potentially a 150 km Lateral Pipeline which enables the connection of additional CSG fields to the Export Pipeline
  - a 200 km Collection Header – a central pipeline located in an Upstream Infrastructure Corridor (UIC) to collect gas from centralised compressor facilities for delivery to the Export Pipeline
  - a pipeline crossing at The Narrows connecting the mainland Export Pipeline with the LNG Facility on Curtis island.

- **LNG Component:** development, construction and operation within the Curtis Island Industry Precinct of the Gladstone State Development Area (GSDA) of a LNG processing plant (LNG Facility) with production capacity up to 12 million tonnes per annum, nominally comprising three LNG processing units or 'trains' with 4 mtpa production capacity each. The LNG Component comprises:
  - onshore gas reception facilities
  - gas pre-treatment facilities for the removal of water and impurities from the feed gas
  - gas refrigeration and liquefaction units sized for 4 mtpa production trains
  - a nitrogen rejection unit for the removal of nitrogen in the feed gas
  - three full containment LNG storage tanks with up to 180,000 m^3 capacity each, with space for another if required
  - a full containment propane storage tank with approximately 100,000 m^3 capacity
  - jetty and docking facilities with turning basin for the loading of LNG carriers and unloading of propane ships to storage
  - a material offloading facility (MOF) for ferry transportation and construction material receiving
  - associated onshore mainland facilities
  - utility requirements to support the LNG Facility.
- **Swing Basin and Channel:** comprising the development of the following:
  - MOF Channel - a temporary access channel to the MOF for vessel access during construction of the Project
  - Curtis Spur Channel consisting of Berth Pocket, Swing Basin, Connecting Channel and upgrade of existing port channels
  - consideration of the range of options for disposal or use of dredge material from dredging activities undertaken for the above.
- **Shipping Operations:** regular transit of LNG tankers and, potentially, infrequent transit of ships carrying propane to the LNG Facility for the 'spiking' of LNG. Shipping operations will involve three stages: firstly, loading LNG/unloading propane at the marine jetty; secondly, transit of ships through Gladstone Harbour; and thirdly, transit of ships through the Great Barrier Reef Marine Park to open ocean.

QGC is seeking approval under this EIS for these principal Components. However, the execution of the Project will require developing a number of associated or Ancillary Infrastructure. Other parties solely or possibly with the involvement of QGC will develop this Ancillary Infrastructure. The environmental assessment and planning permit processes for these Components are separate to this EIS.

To provide a full understanding and context of the Project, where relevant, the

Ancillary Infrastructure, the environment in which it is to be developed and the associated environmental impacts are detailed.

3.2 *ANCILLARY INFRASTRUCTURE*

Ancillary Infrastructure was defined as part of the EIS Reference Case and includes:

- off-tenement transport of the Associated Water, covering water produced from the development of the Gas Field Component off-tenement and its beneficial use
- the Western Basin Strategic Dredging and Disposal (WBSDD) Project to be undertaken by GPC involving the staged dredging of five new shipping channels and the reclamation of land in the Western Basin of the Port of Gladstone using the dredged material
- construction and operation of roads connecting existing roads on the mainland side of the Port of Gladstone with Curtis Island via a bridge from Friend Point to Laird Point. This is an alternative access option to marine transportation that is currently not preferred by QGC and permitting for this component is not sought under this EIS.