

In order to develop a competitive bid for the SKA, the MeerKAT project is investigating the use of solar energy to provide sustainable power to the project's facilities. Various systems are being considered for the project, including:

- A photovoltaic (PV) system to supply energy to the MeerKAT support base and demonstrate the capability of PV facilities to power future remote telescope stations
- A concentrating solar-thermal (CST) system intended to supply electricity to the MeerKAT core.

Hatch conducted a pre-feasibility study investigating the use of solar power systems to power the MeerKAT project facilities. The scope included a technology review of PV technologies, preliminary resource assessment, water requirements and infrastructure analysis, site selection support, electrical grid capacity and conceptual layout designs for the PV array. Project schedules and cost estimates were developed for both a PV and CST system in order to comment on the overall feasibility of the projects.

#### **AUSTRALIA** **INPEX Accommodation Strategy and Stakeholder Engagement**

INPEX, an international oil and gas company, engaged Hatch to develop an accommodation strategy to address accommodation needs for the onshore construction workforce required for the construction of the proposed liquefied natural gas (LNG) processing plant in Darwin. Hatch's Environmental Services Group consulted a range of key local, state and federal government stakeholders, peak business organizations, Indigenous organizations and local residents to help identify the most appropriate accommodation site and gather key stakeholder and community attitudes towards the preferred site. This information was

then incorporated into engineering the accommodation facility design.

Feedback by the client, key stakeholders and the communities involved in the consultation process has been positive. The process was viewed as transparent and well orchestrated by stakeholders involved.

#### **CSRP — Innovative in Sustainable Development Design and Implementation**

Hatch has contributed to the Center for Sustainable Resource Processing (CSRP), a collaborative research centre in the Australian Federal Government's scheme since 2003. Our contribution to the Centre has been providing funding for projects and research capabilities. A member of Hatch Brisbane's Environmental Services Group has been a member of the CSRP's technical advisory panel since its inception.

In terms of thought-leadership, the most important aspect of the CSRP is the development of Sustainable Operations (SUSOP®), incorporating sustainable development principles into the design and operation of industrial processing plants. SUSOP® is a leading industry standard approach to sustainability. A large portion of the theoretical development of the framework was contributed by Hatch and has been tested on a series of projects since 2007.



- ▲ Solar panels could provide renewable power to the MeerKAT radio telescope facilities in South Africa