

## New Business Initiatives

*In addition to strengthening the competitiveness of its core oil business, Showa Shell is actively involved in exploring oil-related businesses and new areas of business that will sustain the Company's growth moving forward. Notably, Showa Shell is involved in a number of concrete initiatives in the field of environmentally friendly, alternative energies.*

### Showa Shell First to Test Market Gas-to-Liquids Fuel

Gas-to-liquids (GTL) fuel is synthesized from natural gas to produce a clean, environmentally friendly liquid fuel that contains almost no sulfur compounds and has virtually no odor. The Royal Dutch/Shell Group, a leader in the field of GTL technology, is involved in field tests conducted in many parts of the world.

In Japan, Showa Shell has been conducting field tests and test marketing of GTL kerosene and GTL diesel oil since 2001. The Company is also working in partnership with Toyota Motor Corporation and Hino Motors, Ltd. as part of a project sponsored by the New Energy and Industrial Technology Development Organization (NEDO) to develop diesel engines for GTL fuel. In December 2004, Showa Shell commenced test sales of the GTL-based Fan Premium brand of fuel for fan heaters and has tested its use as a potential fuel for heating.

The Showa Shell Group has announced plans to build a large-scale GTL plant in Qatar for completion in 2009, which will further cement its lead in both GTL technology and GTL fuel supply.

### Expanding the Fuel Cell and Hydrogen Fuel Business

Since June 2003, Showa Shell, in partnership with Iwatani International Corporation, has been operating the Ariake Hydrogen Station as part of the Japanese Ministry of Economy, Trade and Industry's field test for hydrogen fuel cell vehicles and the Tokyo Metropolitan Hydrogen Supply Station Pilot Program. The field tests will enable Showa Shell to gain expertise in the construction of safe and efficient hydrogen-supply stations and to gain experience in their operation.

At Showa Shell's Central Research Laboratory, the Company is conducting research sponsored by the Japan Petroleum Energy Center (JPEC) to construct a hydrogen production system using hydrogen separation membrane and hydrocarbon reforming technology.

In fiscal 2005, the Company will expand its activities through several initiatives including the deployment of a fuel cell car manufactured by DaimlerChrysler and field tests of residential LPG fuel cell systems as part of a pilot fuel cell project by Mie Prefecture.

### Release of Solar Power Generation System

The Showa Shell Group's solar battery power business was consolidated under Shell Solar Japan Ltd. during 2004. Shell Solar Japan has actively pursued the solar battery power business through various activities including the release of the Shell SunCiela solar power generation system for residential applications in June 2004.

### Ogishima Power Project on Schedule

The Ogishima Power Project is an electric power generation business using liquefied natural gas (LNG) as a fuel, bringing together the respective strengths of Showa Shell and its partners, Shell Gas B.V. and Tokyo Gas Co., Ltd. An environmental assessment and field survey were completed on schedule in 2004, and the Company is steadily laying the groundwork to begin operations by 2009.



*Ceremony for delivery of a fuel cell car*



*Fuel cell bus parked at Ariake Hydrogen Station*



*Shell SunCiela residential solar power generation system*



*LNG tanker*