

# Workshop on Biofuel

**T**he demand for energy is escalating as never before, and unprecedented economic growth in the Asian region continues to push demand higher. It is known that fossil fuels like oil, gas, coal, etc. cannot last forever, and estimates indicate that in the next 200 to 300 years the world will exhaust all such sources if the present demand continues unabated. Then what? Alternative energy sources are the only answer. One attractive alternative is biofuel.

The APO organized a workshop on Biofuel to provide a platform for member countries to discuss and share mutual experiences in biofuel utilization and formulate a standardized policy on biofuel as a traditional energy alternative. The workshop was held in Nadi, Fiji, 24–28 April, in association with the Training and Productivity Authority of Fiji. Twenty-three delegates from 16 member countries attended.

During the workshop, the environmental, technological, social, and economic aspects of biofuel usage were discussed. It was agreed in no uncertain terms that biofuels are beneficial environmentally and socially and that the technology for their collection, storage, and utilization is well established. The technology only needs to be indigenized. However, economically, the expanded use of biofuel requires initial support from member governments and a clear-cut energy policy is necessary. It was noted that many member governments have taken steps in this regard.

The Republic of Korea has initiated intensive R&D on, for example, the use of palm oil-derived biodiesel as automotive fuel and producing biogas through high-efficiency anaerobic digestion processes. Thailand proposes to increase the proportion of nontraditional energy including biofuel from 0.5% to 8% of its total energy supply by 2011. Pakistan has identified potential source materials like beet-, molasses-, corn-, and fruit-processing waste for biofuel development. Bangladesh is placing emphasis on wood and plant waste and agriculture residues for harnessing energy. In spite of its vast oil and gas reserves, Iran has been making efforts to develop alternative energy sources like biomass. Under the Office of the Prime Minister, the Biofuel Development Unit and Department of Energy, Sugar and Coconut, the government of Fiji has demonstrated strong interest in biofuels. Fiji has abundant biomass on its coconut plantations and has good potential to develop alternative biofuels. Mongolia, on the other hand, is examining the use of biofuel for heating *ger* (traditional dwellings). The government of India's decision to mandate the blending of 5%



*Workshop participants visiting the coconut oil (biofuel option) factory of M/s Punjas & Sons Ltd.*

ethanol in petrol in a few states/provinces is a major initiative in this direction, which will be extended to the entire country shortly; the level of blending may rise to 10%.

As a part of the workshop, a field visit was made to the coconut oil factory of M/s Punjas & Sons Limited, located in Lautoka. M/s Punjas is undertaking feasibility studies on the development of biofuel from coconut oil.

The workshop clearly indicated that there is huge potential for developing biofuels as alternative indigenous energy sources that will contribute to energy security. However, the sources, techniques, and applications of biofuel vary depending upon local conditions. The delegates returned from the workshop with the message for their governments and policymakers that initial infrastructure and institutional support are essential to make biofuel a viable alternative and economically sustainable energy source. The development of biofuel also carries an economic incentive in terms of clean development mechanisms (CDM), as biofuels result in lower greenhouse gas emissions as compared with fossil fuels. Proposals from India and Thailand have already been submitted to the international CDM Executive Board under the UN Framework Convention on Climate Change. All other eligible countries need to follow suit to maximize the benefits of biofuel utilization for national economies and the Asia-Pacific region as a whole. 