The Creswick Motel had the ‘No Vacancies’ sign out on Tuesday 20th February as Board members, scientists and industry participants converged on Creswick for the February Board meeting and the annual Program Meeting. The meetings all went well and it was particularly pleasing that many of our Board members stayed for the Program meeting.

Tom Spurling
Chief Executive Officer

December 2006 Project and Budget Review

An important item on the Governing Board’s agenda was the outcome of the December Project and Budget review. The CRC Budget for the three years commencing July 1st 2005 was conservative because of some uncertainty around our likely income and our expenditure on commercialisation activities.

There were also some debt provisions which have now been resolved and some underspending by research providers. All of this meant that we have about $800,000 more to spend in the final two years.

The project review was conducted on the 6th and 7th of December to:

- identify gaps in know-how that could impede technology roll-out and the achievement of good commercial outcomes
- ensure efficient spending of CRC funds
- agree on research directions for the next 2 years, and
- improve the CRC’s track record and accountability with the Commonwealth.

The outcome of the review was clear. It was unanimously agreed that we needed to maintain capability:

- of the microwave research team pending escalation of the accelerated drying project
- of the group required to ensure smooth transfer of licensed preservation technology to TimTech Chemicals
- of the adhesion project team through to the commercialisation of the technology, and
- to ensure smooth transfer of bending technology to Wood Shapes

The Board agreed to supporting these activities and allocated the funds to the research providers.
The Board also agreed that the CRC should conduct two more project reviews, the next one in May 2007, to make sure that we complete all of our obligations by June 30th 2008.

**CRC Governing Board, IWM Centre Management Ltd Board, Commercial Committee and Finance Committee meetings**

This was the first time that all the Committees and Boards of the CRC met simultaneously. This worked well and is a more efficient use of the time of the members of our Boards and Committees. The main outcomes of the meetings are summarised below.

**ACAWP**

IWM Centre Management Ltd has owned and operated the ACAWP since 2003 under trust arrangement with the participants of the CRC. That trust is being formally documented by our legal advisers and the first draft was tabled at the meeting. This is an important issue especially in relation to the future of ACAWP when the CRC is wound up on June 30th 2008.

The Board noted the improvements made on OH&S matters at Creswick and approved the increased expenditure on OH&S upgrades. These arose from the recommendations of a two-day workshop held at Creswick on the 5th and 6th February. We have finally resolved the protocols for the use of personal protective equipment in the microwave room. Four new personal monitors will be purchased. We will be recommending this protocol to the companies commercialising our microwave technology. We are also upgrading the dust extraction equipment at Anne St.

**Participant’s Meeting**

The CRC is an unincorporated collaborative joint venture managed through the Governing Board. The administrative activities are carried out by IWM Centre Management Ltd which has also been appointed as the Commercial Agent of the CRC.

This means that all the major decisions of the CRC, such as commercialisation agreements, have to be signed off by all participants.
The presence of participant representatives at Creswick provided the opportunity for a general discussion of the CRC Wind-up strategy. A document outlining this strategy has to be submitted to DEST by 30th June 2007.

The participants agreed with the strategy proposed.

Performance Indicators

One of the last activities of the CRC will be the submission of the final annual report. This will detail the considerable research and commercialisation achievements of the CRC.

In preparation, a meeting of the research providers agreed to a streamlined presentation of our performance indicators in the final two annual reports.

Program Meeting

The Program Meeting is an opportunity for all associated with the CRC to hear presentations about the research achievements of the CRC.

At this meeting we also had a thought provoking presentation from Dr David Brand, Managing Director, New Forests, on the topic “Forests in the new environmental markets”.

This newsletter features the research activities of our Queensland colleagues.

Activities North of the Border

A core participant in the CRC is the Queensland Government Department of Primary Industry and Fisheries. John Chapman, General Manager, Horticulture and Forestry Science, is a member of the Governing Board.

The Innovative Forest Products (IFP) group at the Department of Primary Industries and Fisheries (DPI&F) is responsible for the CRC’s Project 2.4. The group is primarily located at Indooroopilly in suburban Brisbane and managed by the IFP Science Leader Dr Michael Kennedy.

The focus of Project 2.4 is on the long-term performance of wood under varied environmental conditions, and includes some product design aspects. Two PhD design students (enrolled at the National School of Design, Swinburne University of Technology) have worked on design projects involving furniture and innovative uses for short timber offcuts.
Other students have studied the stability of wood as it is exposed to changing humidity conditions during shipment around the world in cargo containers and as it is subjected to static loads in service. Other studies have generated valuable data on wood performance when exposed to the weather above ground (outdoors). A national above-ground durability trial, commenced almost twenty years ago by DPI&F, has been maintained under the CRC project and is providing invaluable knowledge about the durability of many timber species at a number of sites around Australia. It is anticipated that this knowledge will be used to refine the performance categories for timber in the Australian Standards and Building Codes, reducing the uncertainty associated with timber performance while also reducing the excessive safety factors often applied because of this uncertainty. This should make timber more competitive with alternative building materials.

Work is also underway to develop laboratory-based accelerated tests for assessment of natural durability, and to validate these tests against actual performance in the national trial. It is expected that these accelerated tests will be used in future to assess the properties of both natural heartwood (from timber grown in plantations) and of preservative-treated and other types of modified timber. This will markedly reduce the time taken to obtain this performance information, accelerating gains from both tree improvement and timber product development activities.

DPI&F has an active research portfolio in the development of early return products from hardwood plantations. This portfolio supports the state government policy of phasing out logging from native forests on state lands in favour of plantation sources. It aims to improve cash flows to plantation managers early in the rotation, partially offsetting establishment costs and significantly improving plantation economics. In addition to studying the wood properties of thinnings and small diameter logs, the diverse group of scientists works on product design and process development (for log conversion, seasoning, preservation, protection in service) and general value adding to the new resources.

Other research is chemistry-intensive, including developing novel uses for extractive compounds recovered from waste timber processing streams, overcoming processing problems due to staining associated with extractives and fungi, developing control systems for termites and other novel protective chemical treatments, and impregnation systems. DPI&F is also responsible for the technical administration of two pieces of Queensland legislation – the *Timber Utilisation and Marketing Act* and the *Diseases in Timber Act*. 
In addition to well-equipped chemistry and biology laboratories at Indooroopilly, DPI&F operates an experimental timber processing facility at Salisbury (a nearby suburb) with extensive sawing, peeling, gluing, seasoning, treating and strength-testing facilities.

DPI&F is also responsible for research on the ‘growing’ side of forestry in Queensland, up to the point of harvest. Led by Dr Steven Underhill and based at Indooroopilly and at regional centres at Gympie and Mareeba, this group is active in plantation hardwood tree improvement, forest health and protection, tree physiology and nutrition, etc. Of major interest at present are *Corymbia spp.* (the spotted gums) and their hybrids, and African mahogany. DPI&F has recently released the first clones of a new hybrid between parents spotted gum (*Corymbia citriodora* var *variegata*) and cadaga (*Corymbia torelliana*), with superior growth, form and disease resistance to the parents.

DPI&F currently employs about 55 forestry and forest products scientists and technicians.

**Commercialisation Update**

**Wood Bending**

It is anticipated that the prototype production machine will be installed and producing bent timber components before the end of 2007.

**Enhanced Adhesion**

A study of the wood adhesion market by TechPartners Australia has been completed and will be useful to us in commercialising this technology. The continuing work on this project is showing that the technology is effective on a wide range of both timbers and adhesives. There is no combination that has been tried and failed. We have commenced negotiations with our participant, Bostik, and hope to report progress in later editions of Across the Board.

**Improved Pyrolysis**

The SRDC project is about to commence. This will not be completed before June 2008.
Hot Wood Treatment Process and Fast Treatment Plant (Wood Preservation)
The Board approved (subject to certain conditions being met) the extension of the license agreement with TimTech from Australia and New Zealand to worldwide.

Microwave Modification of Timber
As mentioned in the last newsletter this technology is applicable to two product classes:

1. Appearance grade hardwoods. Microwave modification used to improve drying quality and reduce drying time.

This project is progressing well. Early results are very promising. We are investigating an addition to the original project to more explicitly study accelerated drying.

2. Improve permeability of the corewood in lower value timbers

We have engaged Dinning Engineering Consultants to design and cost a commercial plant. We have also engaged Dennis Leane (an experienced technical writer) to codify the considerable tacit knowledge of our scientists.

Vintorg
Koppers Wood Products are still in discussions with the CRC regarding the use of the Vintorg process in power poles.

Growth Stress Meter
A more advanced prototype has been constructed which will now be tested in forest locations around Victoria.

Finally
The success of the February meetings in Creswick was due to the work of Allison Roper, Sunny Munn, Dawn Gager, Penny Blackwell and Phil Blackwell. The final CRC Program meeting will be held in February or March of 2008. This will be a celebration of the scientific, technological and commercial achievements of the CRC.