

## BRANCH REPORT - 2011

### April Branch Meeting – Dr Simon Lovatt, Presenter

#### “Innovation’s Contribution to the NZ Economy”

In the Waikato-Bay of Plenty Branch we have a number of internationally recognised professional engineers but as the saying goes they are like poets and not recognised in their own home town.

At our April Branch meeting, Members were treated by having a guest speaker who is an international professional engineer and scientist recognised for his R&D work on refrigeration plant and processes plus recent years’ research and production of strategic plans for agri-research based led contributions to the land based sector.



(l to r) Dr Simon Lovatt being thanked by Branch Chairman Barry Dowsett

Former Waikato BOP Branch long term committee member, Secretary and Chair, Dr Simon Lovatt presented to branch members on the subject of innovation and its contribution to the New Zealand economy.

Simon previously worked for MIRINZ and now for AgResearch, the Crown Research Institute (CRI) whose “purpose is to enhance the value, productivity and profitability of New Zealand’s pastoral, agri-food and agri-technology sector value chains to contribute to economic growth and beneficial environmental and social outcomes for New Zealand” (according to its Statement of Core Purpose).

Simon began by showing how technological innovation (in the form of ship-building and navigation) was essential for Maori to reach New Zealand and then how biological innovations (such as introducing sheep) and technological innovations (such as refrigeration, using cobalt in fertiliser to eradicate “bush sickness”, etc.) were essential to create New Zealand’s economic growth in the 19th and early 20th centuries. He then outlined how New Zealand’s innovation system had developed, focusing on the development of universities, DSIR, etc. as research organisations, then the funder-provider split and the development of Crown Research Institutes.

It was interesting to see that these changes had led to considerable efficiencies. By some measures, New Zealand’s innovation system is one of the most productive in the world: second most productive in the world, as measured by publications per “dollar of basic research investment”; second most productive as measured by Patent Co-operation Treaty (PCT) patents per million dollars of R&D investment; and the most productive in the world as measured by PCT patents per million dollars of industry-funded R&D investment. However, traditionally New Zealand’s low total investment in R&D and very low industry-funded R&D investment have been identified by many commentators as a source of problems. (In the subsequent discussion this point was strongly reiterated by members as a key curb on economic and employment across all industrial sectors).

Simon provided some practical examples of how innovation had transformed some of New Zealand’s major industries’ productivity. For example, the weight of lamb exported per adult sheep in New Zealand increased 81% between 1997 and 2009. Innovation has led to agricultural productivity increasing far faster than productivity in the rest of the economy, and faster than any other sector except for communications.

His conclusions are that the current transformation of the innovation system is coming about as a result of the implementation of the CRI Taskforce 2010’s recommendations. These included having a clear statement of core purpose for each CRI, that the Government should directly fund CRIs to achieve that core purpose, that there should be stronger partnerships between CRIs and New Zealand businesses and that Government should identify technology transfer as a core responsibility of CRIs. The Government has also boosted both government and private investment in primary sector innovation through the 50:50-funded Primary Growth Partnership scheme.

Finally, Simon summarised the key recommendations of IPENZ's recent report "Catalysing Economic Growth", which identified the need to boost expertise in our private sector to develop, adapt and adopt new technologies (innovation expertise); and the need to make the New Zealand economy more "sticky" to high technology companies so they remain here instead of going overseas.

He suggested that the IPENZ report is well worth reading. It can be found at

[http://www.ipenz.org.nz/ipenz/media\\_comm/documents/CatalysingEconomicGrowthPDF-forweb.pdf](http://www.ipenz.org.nz/ipenz/media_comm/documents/CatalysingEconomicGrowthPDF-forweb.pdf)

Through the Chairman, Members expressed to Simon their appreciation for his detailed preparation and presentation of an essential update on the current structure and management of a critical New Zealand resource with an enviable track record, dedicated to sustaining and catalysing quality of community life, also aided by the resource's contribution to economic growth.

In subsequent discussion it was strongly reaffirmed that the Waikato generally and Hamilton specifically holds the key resource set for streams of innovative products and processes. The burgeoning University Engineering and Science Schools, MAF Ruakura and NIWA campuses, plus the Innovation Park are allied to key industries, many of which have a presence in the city and employ our Members. For example we have the international engineering based giant Gallagher Group and Fonterra with its key innovative process engineering support companies. We are proud of our traditional large contribution to innovations boosting the growth of the NZ economy's productive sector, which vitally includes its consistently growing manufacturing engineering sector.

The Waikato Branch very much appreciates the fact that Dr Lovatt made the time to come and address the Branch.

**Norm Stannard**