



Institute of Actuaries of Australia

Actuarial Involvement in Wider Fields

An Australian Perspective

Helen Martin, IAAust President Elect



Actuarial Involvement in Wider Fields

- **50% of FIAs - Life Insurance or Pensions (Super) as primary practice area**
- **Increasing number of FIAs are working in General Insurance, Health, Finance, Banking, Investment and Funds Management**



Actuarial Involvement in Wider Fields

- **Leading edge research and policy development in “wider fields”**
- **New Climate and Energy Practice Committee**
- **IAAust Futurism Committee**
- **Conferences with other professions and groups**



Climate Change

- **Kyoto Protocol**
- **Cost and competitive implications**
- **Complex, long term risks**
- **Actuaries advise on Corporate Climate Change Strategies and assess expected impacts of emissions trading on existing operations**
- **Also evaluate the impact of Climate Change Policy on new investment projects**



Electricity Markets and Energy Trading

- **Volatility in supply and demand factors**
- **Competitive market creates new financial risks for buyers and sellers**
- **Actuaries advise market participants on risk management**
- **Also analyse the market and apply stochastic analysis**
- **Consider alternative risk investigation approaches eg weather derivatives**



Infrastructure Investment

- **Projects such as roads, airports, power stations, mines and pipelines**
- **Alternative sources of finance**
- **Complex financial analysis and cash flow modeling required**
- **Risk allocation puzzle between investors, lenders, operators, governments, users**
- **Use scenario and Monte Carlo analysis or other advanced quantitative techniques**



New Fields for Actuarial Science and Practice

- **Genetic Developments**
- **Valuation of Biodiversity**
- **Weather Derivatives**
- **Socially Responsible Investments**
- **Environmental Management and Sustainability**
- **Neural Networking**

