

**!! Welcome !!**

## ***Bio-materials Workshop***



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***Your workshop chairperson***



# Workshop Format

1. Introduction of bio-materials
2. The opportunity
3. BEAB actions 06
4. Russell Burton – bio-materials examples
5. The questions to be answered



# Bio-materials

## **Drivers of change: Global**

### ***Energy supply & price volatility***

- = oil & energy shortages
- = high energy materials out!
- = low energy materials in!

### ***Extreme weather***

- = climate change/greenhouse gases
- = Kyoto protocols
- = fossil fuel burning out

## **National**

### ***Energy supply & price volatility***

- = NZ exposed – imports oil
- = plant-based fuels and materials

### ***Extreme weather***

- = carbon taxes & credits
- = carbon sequestration in
- = carbon emissions out
- = standards favour wood (etc)
- = innovative bio-materials emerge

## **Rotorua's comparative advantages**

- = centre of NZ forest industry
- = arable land & farming knowledge
- = Scion & bio-materials strategy

## **Opportunity: Bio-materials**

- = a 21<sup>st</sup> Century global revolution is coming
- = can NZ repeat 20<sup>th</sup> Century NZ forestry revolution?
- = land use, forestry, manufacturing opportunities
- = Turn threat to opportunity



# The opportunity

## Market estimates

- USA: 2005 US\$60 billion – 2010 US\$180 billion est.
- Canada: 2020 US\$100 billion est.
- Europe:
- US plastics market US\$300 billion – 10% bio by 2010

## Fuel prices

	1/1/06	31/7/06	% rise
Petrol	\$1.39	\$1.77	27%
Diesel	96c	\$1.28	33%

# BEAB actions

## Innovative Materials Centre

- **Commercialisation centre for bio-technology, turning ideas into businesses**
- **Developing business case now. Basic principles:**
  - Commercially sustainable value for participants
  - Globally defensible IP – international/export focus
  - Driven through early adopters – not for all
  - Public/private co-investment
- **NZTE Major Regional Initiatives Fund**
  - \$2m to be matched by industry @ 30%-50%

# Russell Burton - SCION





# ? The questions to be answered??

Given Rotorua's position as the center of the wood industry in NZ, plus its abundance of arable land for cropping of biomaterial dedicated crops -

- What can we do to promote NZ's position as a leader in the development of innovative biomaterial sourced products?
  - Now and longer term?
  - What technology is required?
  - Which industries are accessible by new biomaterials?
  - Who are the key players?
  - What are the products?
  - How can we help the process?
  - Who wants to register to develop the thinking and networks?

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Rotorua

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**Thanks for your participation**

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