

Engineering Profession in Australia

Challenges Ahead





Value Adding Diminished

- **Today**
 - ✳ **Manufacturing - Offshored**
 - ✳ **Very Expensive Energy**
 - ✳ **Aging Infrastructure**
 - ✳ **Civil, Utilities and Energy**
 - ✳ **Lost of Global Competitiveness**
 - ✳ **Increase Red and Green Tape**
 - ✳ **Killed off SMEs**





The Loss

- **Industry being Offshored**
- **Engineering Jobs also Offshored**
- **Loss of Engineering capability**
- **Loss of Innovation**



Progressive loss

- 1. Fabrication Offshored but Eng Onshored**
- 2. Engineering Jobs also Offshored**
 - a) Global Eng Firms**
 - b) Internet**
 - c) Increase Government Red and Green Tape**
 - d) Increase Engineering Red Tape**





Danger

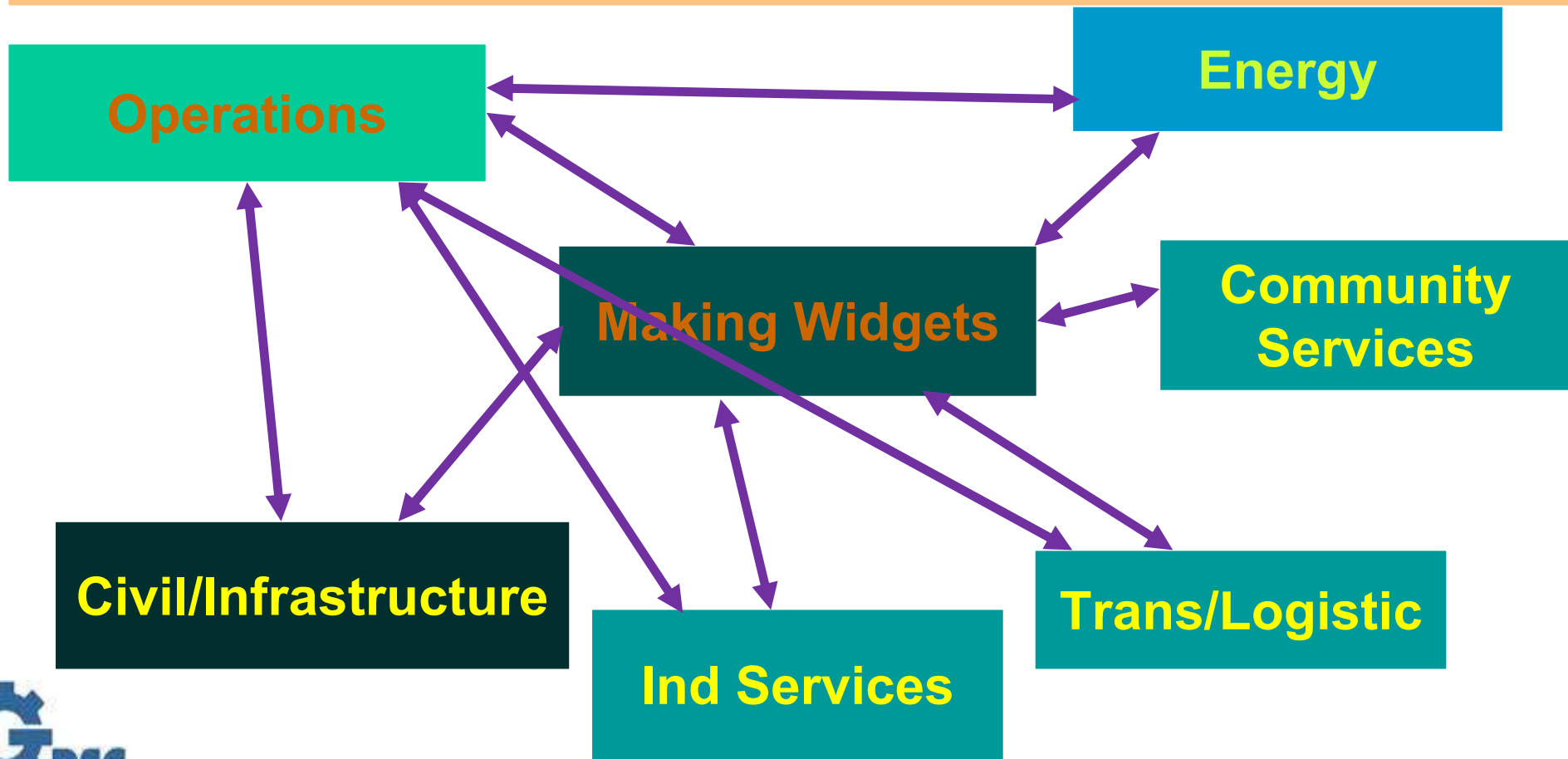
1. Profession will be reduced to:

- ❖ Project Managers
- ❖ Sales Engineers



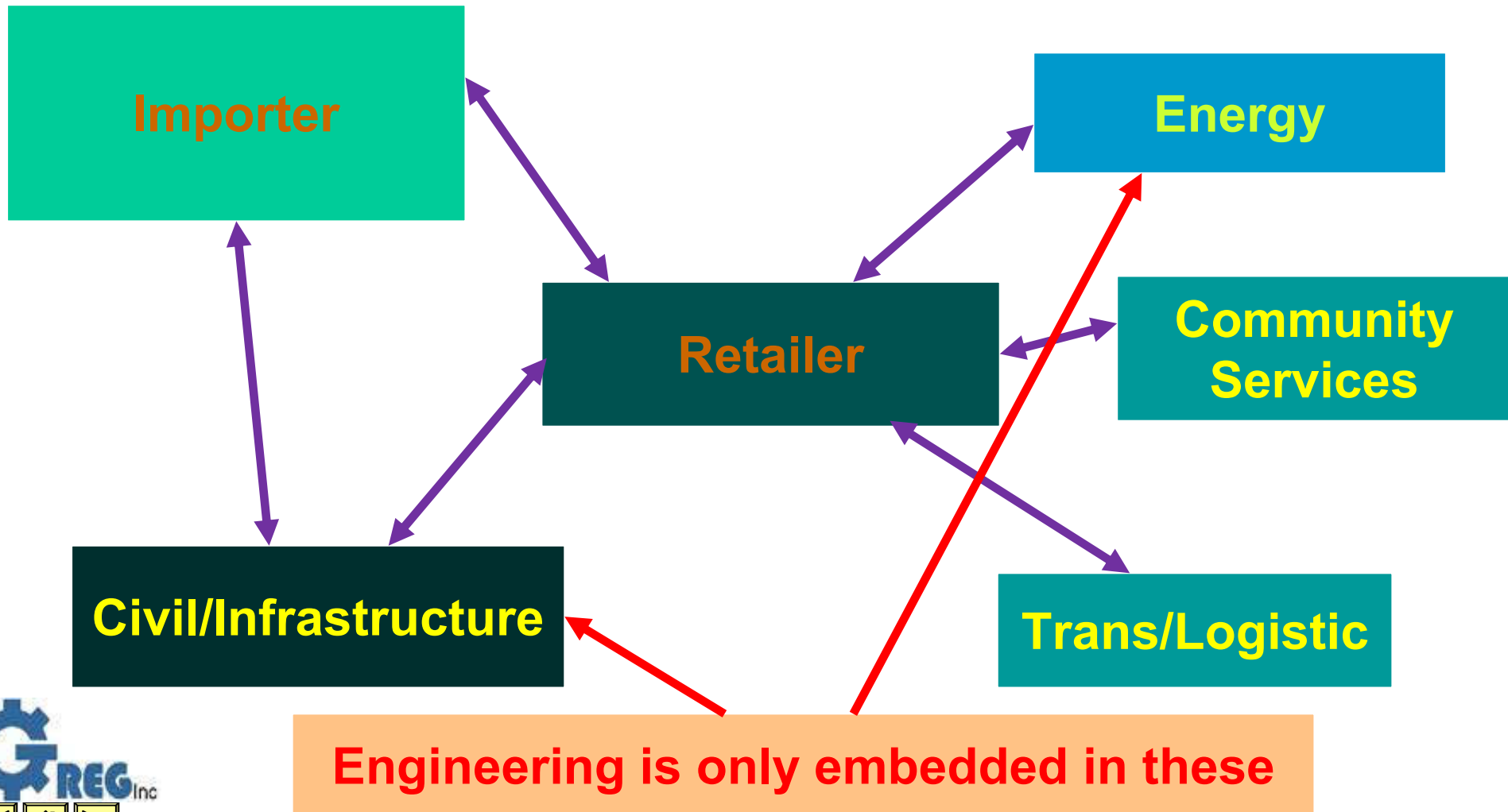
A Connected Value Adding Economy

Engineering is embedded in all





In A Global Supplied Economy





**Industry
that needs
Engineers**

**Economy's
ecosystem**

**National
Strategic
Policies**

**Teaching
Institution
connected
to Industry**

**Investment
Capital**





Cliff Fall Ahead

- **Increased Reliance on Global Engineering**
- **Eroding Engineering Capability**
- **Loss of Nation's Cognitive Sovereignty**





What Can Each of We Do?

- **As a Collective**
 - **GREG**
- **As Individuals**





What Can Each of We Do?

- **Influence within your circle**
- **Influence outside your circle**
- **Advocate for engineering input and participation**
- **Advocate for Engineering input to Investments**
- **Connect with Policy Makers**





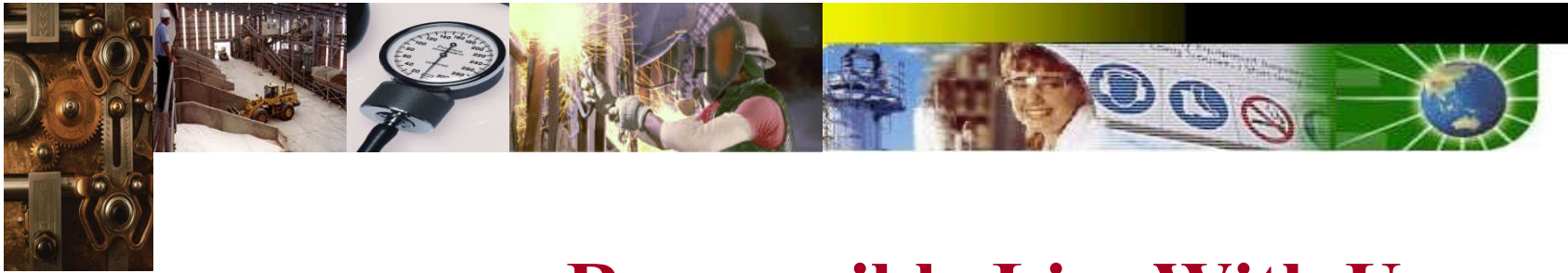
Strategic - Not a Short Term execution

- **Capability cannot be surged in a crisis**
- **Requires change of thinking**
- **Community Education**
- **Educating Policy Makers (Awareness)**





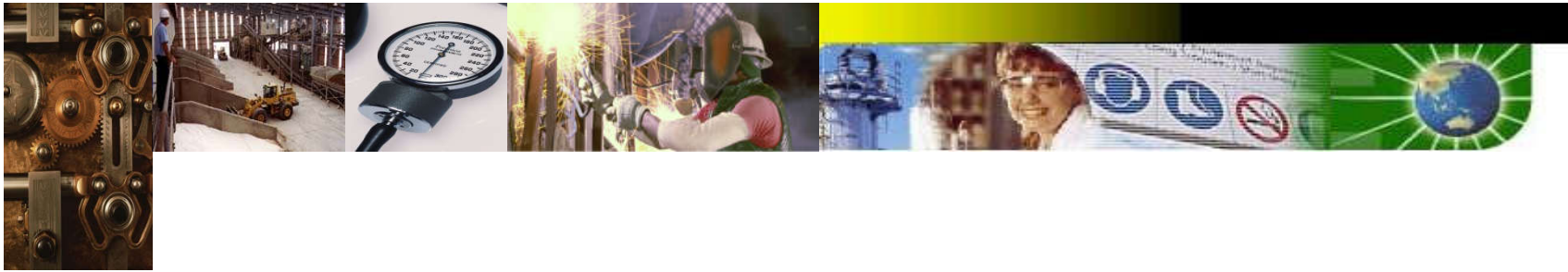
- **Everybody** was asked to do it
- **Everybody** was sure **Somebody** would do it
- **Anybody** could have done it but **Nobody** did it
- **Somebody** got angry because it was **Everybody's** job
- **Everybody** thought **Anybody** could do it,
- But **Nobody** realised **Everybody** wouldn't do it
- It ended up **Everybody** blamed **Somebody** when actually **Nobody** asked **Anybody**.



Responsible Lies With Us

- **Its GREG**
- **Its Our Engineering Profession**
- **Its Our Engineering Future**
- **Its Our Nation's Future**
 - ❖ **Self Reliance**
 - ❖ **National Security**
 - ❖ **Safe Guard Against Declining Living Standard**





Thank You!



Bernard Chen