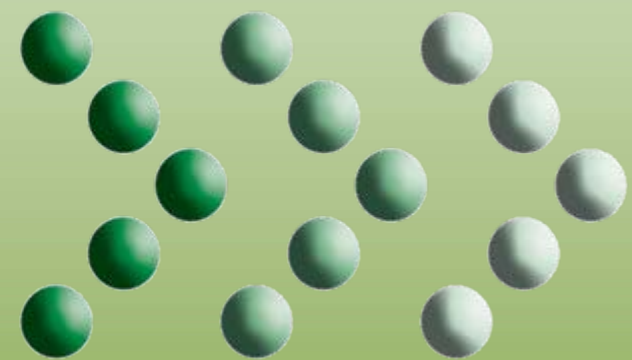


MPI



Wood Pellets

**It's the "WHAT"
that counts – the
"HOW" comes
later!**

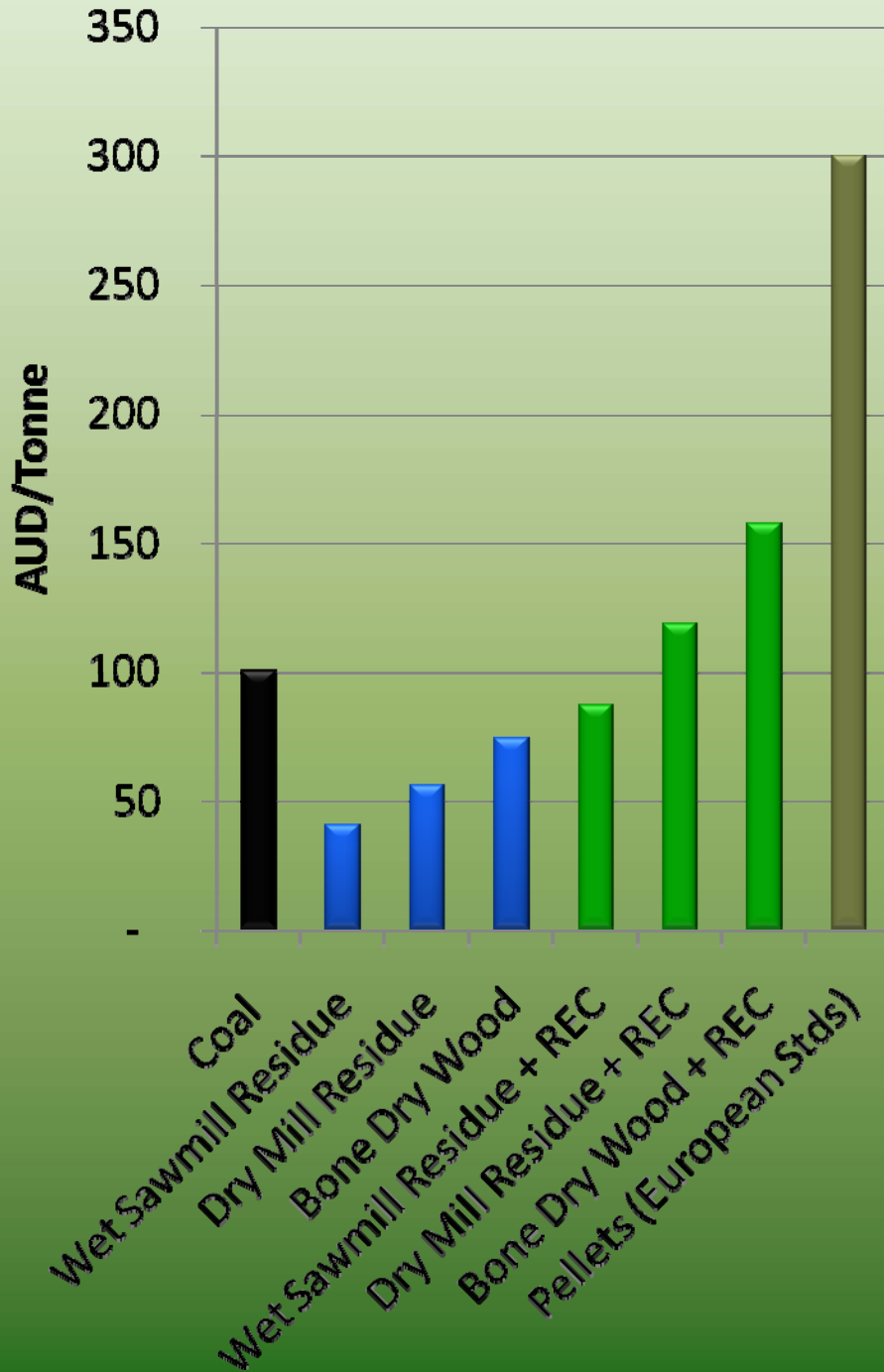
Peter Druker



What is the Question?

- **Generally, people want to know:**
 - **What are the ways to make pellets?**
 - **How much does it cost to make them?**
 - **What is the capex?**
- **What they should ask is:**
 - **Why should I be in pellets?**
 - **Which pellets should I be in?**
 - **How can I maximise my return?**

Relative Values

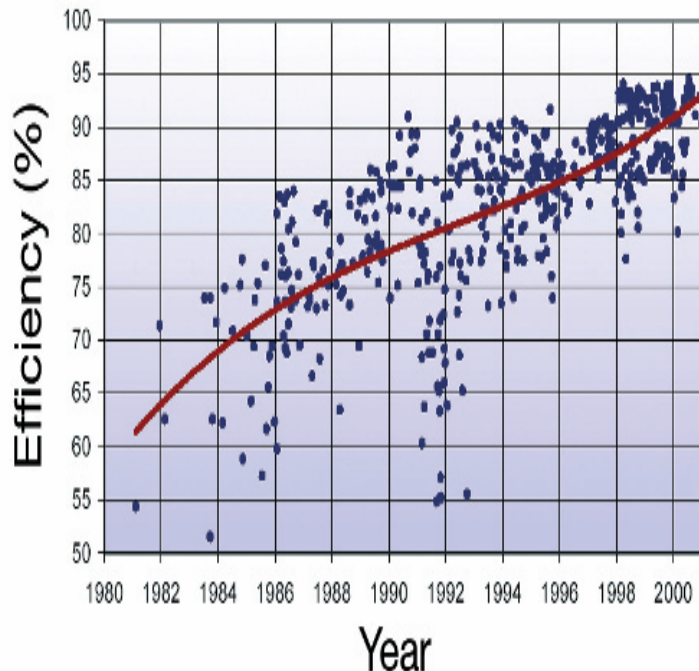


- Consider relative value on an energy equivalent basis (blue bars - \$3.70/GJ)
- Value shift through impact of Renewable Energy Certificates (green bars - \$7.90/GJ).
- European Pellets much higher value (\$17.8/GJ).

WHY? Substitution cost !

- European Pellets substitute of **HEATING FUEL**
- Biomass fuel substitutes for coal (or “clean coal”)

- Pellet Fuel Stoves have gradually improved in combustion efficiency
- Modern stoves achieve about 95% combustion efficiency at small capacities!



Technology

■ Pellet Technology is NOT a constraint!

- Widely available
- Multiple competing vendors
- High conformance to standards

■ Pellet Combustion Technology has been the key to market growth (as well as regulation/incentives).



Integration is the Key

- **Pellet Manufacturing needs to be integral to the saw mill & energy generation.**
- **Works best in Dry Mill with Biomass Power Plant**
- **Modern Integrated Mills:**
 - **Use bark as plant boiler fuel (saw mill residue is too valuable to use as a coal substitute)**
 - **Energy Plant powers 100% of Mill (thermal & electrical) with surplus energy exported for sale**
 - **Saw Mill Residue converted into high-value fuel pellets (normally the highest value product on a “per weight basis”)**
- **This requires significant scale of operation and a long-term perspective**





So You Want to be in Pellets?

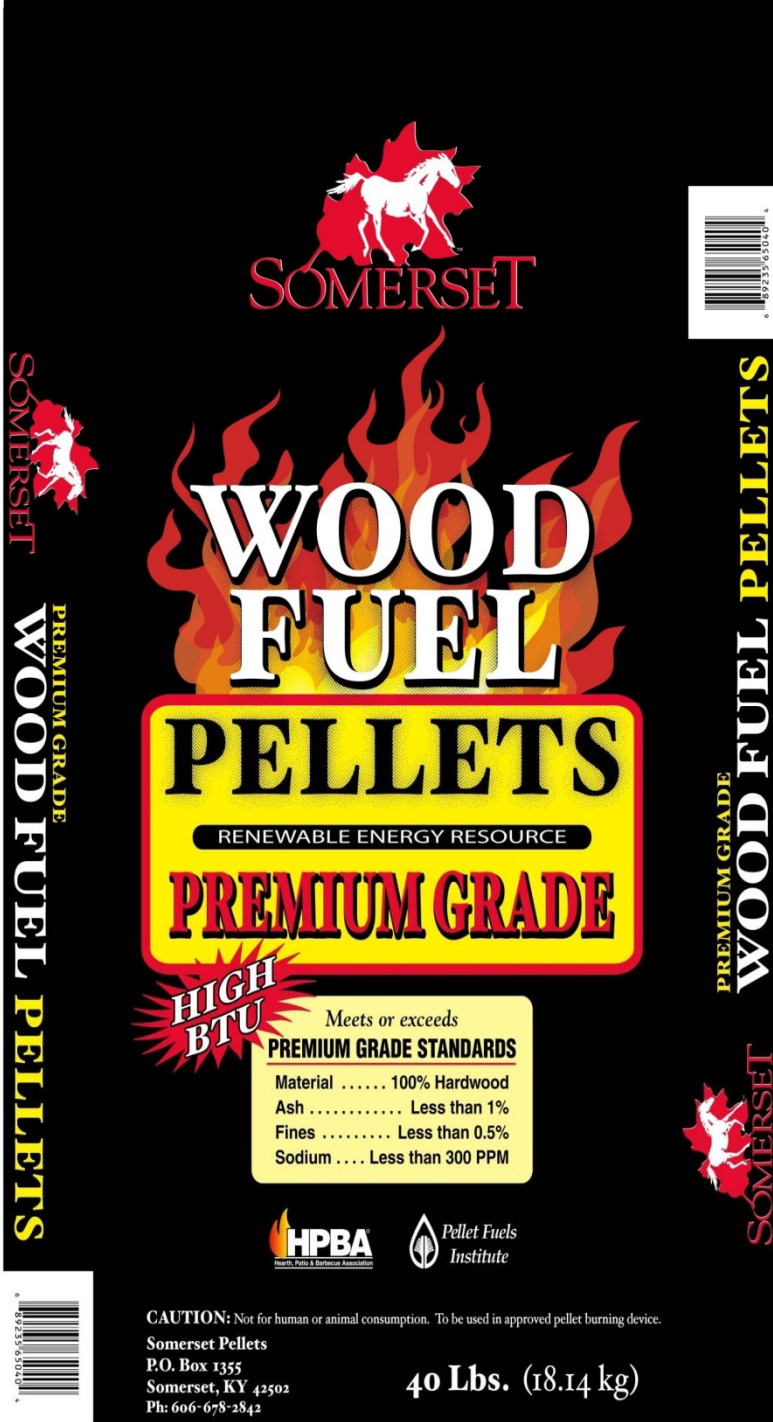
- **Markets:**
 - **Co-firing**
 - **Biomass Plants**
 - **Fuel Pellets (Europe & US)**
 - **Which is the Highest Value?**
- **How Can we overcome the Australian Diseconomy of Scale?**
- **How can we build Value?**

Premium Product/Commodity

- **Little difference in operating cost between pellet types**
- **Main differentiators are:**
 - **Source Material – Virgin/Recycled & Clean/Dirty**
 - **Moisture Content**
 - **Mechanical Properties**
- **Application/Markets**
- **Branding**

A Strategy for Australian Saw Mills

- Build on Natural Advantages – “Clean and Green” (Branding)
- Overcome diseconomy of scale by bringing portable pellet plant to multiple mills
- Forward Integrate into finished product in 20 kg bags complete with brand identity
- Develop distribution model in high-value markets (Europe)



The image shows the front and side of a bag of Somerset Wood Fuel Pellets. The front panel features a white horse logo on a red maple leaf background at the top, with the word 'SOMERSET' in red below it. The main text 'WOOD FUEL PELLETS' is in large white letters over a flame graphic. Below this, 'RENEWABLE ENERGY RESOURCE' is in a black bar, and 'PREMIUM GRADE' is in red. A 'HIGH BTU' starburst is on the left. A table of specifications is in the center, and the HPBA and Pellet Fuels Institute logos are at the bottom. The side of the bag repeats 'PREMIUM GRADE WOOD FUEL PELLETS' vertically. A barcode is at the top right, and another is at the bottom left.

SOMERSET

WOOD FUEL PELLETS

PREMIUM GRADE

RENEWABLE ENERGY RESOURCE

PREMIUM GRADE

HIGH BTU

Meets or exceeds

PREMIUM GRADE STANDARDS

Material	100% Hardwood
Ash	Less than 1%
Fines	Less than 0.5%
Sodium	Less than 300 PPM

HPBA
Hardwood Pellet & Biomass Association

Pellet Fuels Institute

CAUTION: Not for human or animal consumption. To be used in approved pellet burning device.

Somerset Pellets
P.O. Box 1355
Somerset, KY 42502
Ph: 606-678-2842

40 Lbs. (18.14 kg)

PREMIUM GRADE WOOD FUEL PELLETS

SOMERSET

MPI 

Conclusion

- **Selling Biomass as a Coal Substitute (Boiler Fuel) is a low-value business and transport costs are a major impediment**
- **Fuel Pellets for the European Home Heating Market are the highest value end-market**
- **To succeed, Australian producers need to build a value brand and target the high-value end market – requires distribution strategy**
- **A Co-operative approach with a shared portable pellet plant will help overcome the diseconomy of scale**

Questions & Answers