Green Week 2013
Delivering the Green Economy
Poland’s ambitious woody biomass plantation
Agenda

1. Business rationale
2. Production methods
3. Use of fast-growing poplar
4. Environmental advantages
5. Challenges
6. Benefits
Agenda

1. Business rationale
2. Production methods
3. Use of fast-growing poplar
4. Environmental advantages
5. Challenges
6. Benefits
Business rationale is compelling: an alternative wood source

Business based on renewable resources:
- 2.1 mln tons of wood/year
- High cost: 30% imports

Sustainable sourcing of wood:
- Closer to mill to reduce transport fuel & emissions
- Increase supply from Poland
Business rationale is compelling: a carbon-neutral alternative to coal

- Increase use of biomass
  - Reduce non-renewable energy use
- EU target of 20% renewables by 2020
  - Biomass is renewable
  - Plantation trials successful
  - Expanding to ≈ 10k hectares
- Insure IP sustainability in Poland

IP’s Kwidzyn mill, 100 km south of Gdánsk
Agenda

1. Business rationale
2. Production methods
3. Use of fast-growing poplar
4. Environmental advantages
5. Challenges
6. Benefits
Production methods:

- Target land < 150km of the mill
- Field preparation with contractors
- Planting April-May with “rods”
- Trees grow fast with weed control
- 3-4 growth & harvest cycles / rod
Agenda

1. Business rationale
2. Production methods
3. Use of fast-growing poplar
4. Environmental advantages
5. Challenges
6. Benefits
• Ready for harvest in 3-6 yrs
• 25-30 tons of wood / ha / year
• Chipping in-field is an option
Wood for Biomass: 3-4 yrs growth
Wood for pulp: 5-6 yrs growth
Agenda

1. Business rationale
2. Production methods
3. Use of fast-growing poplar
4. Environmental advantages
5. Challenges
6. Benefits
**Environmental advantages:**
a versatile crop

→ **Grows on a range of sites**
  - option for idle lands

→ **Perennial with deep root system**
  - reduces runoff and soil erosion
  - improves water quality
  - acts as air filter

→ **Efficient use of resources**
  - Less input of chemicals and energy
Environmental advantages:
carbon neutrality

- Biomass is carbon neutral
  - $CO_2$ captured, stored, released in a cycle
  - fossil fuels only release $CO_2$

- Improves air quality
  - absorbs $CO_2$ / releases oxygen

- Efficient combustion
Agenda

1. Business rationale
2. Production methods
3. Use of fast-growing poplar
4. Environmental advantages
5. Challenges
6. Benefits
Challenges:

→ Renewable energy target aggressive
  • 15% in 2020
  • biomass and wind - key levers
  • wind targets optimistic

→ Biomass most viable alternative to 15% goal
  • demand is large and growing
  • forest wood waste decreasing
  • slow mobilization
Challenges:

Government can help industry to achieve targets
- “Systems” approach
- support technology
- production incentives
- land reclamation
- production / use incentives
Agenda

1. Business rationale
2. Production methods
3. Use of fast-growing poplar
4. Environmental advantages
5. Challenges
6. Benefits
Delivering the Green Economy

- Renewable energy
- New jobs
- Regional development
- Farmer crop choices
- Reduce imports

Sustaining Business

- Wood is essential
- Biomass is vital
- “Made in Europe”
Thank you for your attention!