Government programs promoting bioeconomy through woodworking industries

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The next wave of economy is bioeconomy, which produces economic growth and wellbeing.
Finland is a bioeconomy forerunner. We have plenty of natural resources, expertise and agility.
The potential of Finnish forests

Finland’s well-being is based on our ability to use renewable resources efficiently and sustainably. Forests and clean nature have always been the basis of our existence.

Puuston kasvu ja poistuma
Annual increment of growing stock and drain

Metsätollinen vuosikirja 2013

Source: Finnish Forest Research Institute
Innovation, cooperation and integration make Finland a real pioneer in bioeconomy.

Forest, energy, chemical and construction industries have integrated into a new industrial ecosystem.
Vision: Finland 2025 - built up together

**REFORMS**

- Favourable conditions conducive to business
- Incentive traps and structural unemployment
- Local bargaining and barriers to employment
- Reform of the labour administration
- Increased housing production

- New learning environments and digitalisation
- Vocational upper secondary education
- Transition to the labour market
- Improved access to art and culture
- Cooperation between higher education and business life
- Youth guarantee towards community guarantee

- Customer-responsive services
- Health, wellbeing and inequality
- Programmes to address child and family services
- Home care and informal care for the elderly
- Entry into labour market by people with partial work ability

- SOTE reform
- Municipalities' duties and obligations
- Municipality of the future
- Regional administration reform
- Central administration reform

- Carbon-free, clean, renewable energy
- New forest products
- Circular economy and water systems
- Food production and blue bioeconomy
- Nature policy

- Digitalisation of public services
- Digital business environment conducive to growth
- Deregulation
- Culture of experimentation
- Leadership and execution

**CORNERSTONE PROJECTS**
## Finances allocated to strategic themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Allocation</th>
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<tbody>
<tr>
<td>Employment and competitiveness</td>
<td>170 Meur</td>
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<tr>
<td>Bioeconomy and clean solutions</td>
<td>300 Meur</td>
</tr>
<tr>
<td>Skills and education</td>
<td>300 Meur</td>
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<tr>
<td>Well-being and health</td>
<td>130 Meur</td>
</tr>
<tr>
<td>Digitalisation, experimentation and regulation</td>
<td>100 Meur</td>
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Min. of Employment and the Economy: 369 Meur

- 165 Meur
- 145 Meur
- 59 Meur
Strategic theme: Bioeconomy and clean solutions

Ten-year objective:
Finland is a pioneer in the bioeconomy, a circular economy and cleantech. By developing, introducing and exporting sustainable solutions we have improved the balance of current accounts, increased our self-sufficiency, created new jobs, and achieved our climate objectives and a good ecological status for the Baltic Sea.

Government-term objectives:
– Finland has achieved the 2020 climate objectives already during the government term. Imported fossil fuel-based energy has been replaced by clean and renewable domestic energy.
– The growth of cleantech enterprises, the increase in the sustainable use of natural resources, multi-business rural enterprises and an efficient circular economy have contributed to the creation of new jobs.
– Profitability of food production has improved and the trade balance has risen by 500 million euros.
– The administrative burden which has slowed down the renewal has been significantly reduced.
Bioeconomy and clean solutions

- Key project 1: Towards carbon-free, clean and renewable energy cost-efficiently
- Key project 2: Wood on the move and new products from forests
- Key project 3: Breakthrough of a circular economy, getting waters into good condition
- Key project 4: Finnish food production will be profitable, trade balance on the rise
- Key project 5: Nature policy based on trust and fair means

Funding 300 M€ for the government term (2016 – 2018)
Key project 1: Towards carbon-free, clean and renewable energy cost-efficiently

**GOALS:** Share of renewable energy >50% by 2020s, cut of imported oil to half of current level, other energy goals of government programme

**DESCRIPTION:** New energy and climate strategy 2030 will be created along with implementation plan, incl. Promotion of renewable energy

**MAIN ACTIONS:**

1. Comprehensive energy and climate strategy 2030
2. Additional finances for energy subsidies
3. Medium-term plan on climate policy
Key project 2: Wood on the move and new products from forests

GOALS: The utilization of wood will be increased, diversified, aiming at higher added value. In Finland, we will create competitive and sustainable bioeconomy solutions to meet global needs, and create new business, jobs and exports.

DESCRIPTION: The availability of wood and its diversified use will be boosted. The size of forest properties will be increased, aiming at entrepreneurial silviculture and best practices in silviculture. Bioeconomy research and innovation activities will be boosted, along with a pilot and demonstration programme. Quick piloting and commercialization will be speeded up.

MAIN ACTIONS:
1. Speed up change of generation and improving the forest property structure by changes in taxation
2. Development of forest data system and e-services based on the system
3. Wood construction will be facilitated by de-regulation in the building sector
4. Investments in the forest industry will be promoted as well as the mechanical wood industry as a whole
5. Bioeconomy research & innovation and pilot & demonstration programs
Puhtaasti biotalouteen
Bioeconomy enabled by cleantech

BioNets
Network and Profit

CleanWeb
Scale and Profit

Arctic Seas

Growth Campaigns
Tap into new growth markets - Tekes services as a catalyst

MISSION:
From raw material centric to market centric mindset – from utilization of natural resources to creating customer value.

VISION 2025:
Bioeconomy and Cleantech form a customer-driven dynamic growth sector, that has gone through renewal by high-value products, new business models and digitalisation.
Growth of exports is to a great extent based on new high-value products.

Part of Government program’s key project: Bioeconomy and clean solutions
Team Finland Growth Programs

- Finpro, Export Finland runs several programs to promote international business operations by Finnish companies.

- Growth program helps companies participating in the program to find new, growing international markets, increase international growth and develop new businesses.

- 2015-2017 the total volume of growth programs is 51,3 Milj. €

- Bioeconomy growth program is targeted to Finnish companies operating with innovative bioproducts, circular economy and innovative technologies for processing biomass and wood products.

- Wood from Finland is an export program for the sawmill industry. The program is carried out by the Team Finland organizations, The Finnish Sawmills Association and 19 private companies in the Finnish sawmill sector.
Team Finland Growth Programs

FinConnect Investor Days in the Near East (IIF)
Golden Bridge (IIF)
Mark-it! (IIF)
MOCT 2.0 – Investments from Russia (IIF)
Myanmar (GN)

Startup from Finland (IIF & cross industry)
Growth Program for Emerging Markets (EF)
Start-up Ecosystems 2016: Slush & VC (IIF + EF)

Wood from Finland (EF)
Waste to Energy and Bioenergy (EF)
Agrotechnology from Finland (EF)

Innovative bio products (IIF + EF)
Packaging (biomaterials & machinery) (EF)

StopOver Finland (VF)
Finrelax (VF)
Finnish Archipelago (VF)

Food from Finland (EF)

Beautiful Beijing (EF)

Cleantech Finland (EF)

Maritime and Offshore from Finland (EF)
Mining Finland (EF)

ICT & Digitalization

Mobility as a Service – Intelligent Vehicle and Traffic (MaaS) (EF)
Industrial Internet – Capitalize Your Knowledge (EF)
Connectivity from Finland (EF)
Kaato continuation (IIF)
Data Centers 3.0 (IIF)

Team Finland Health (IIF+EF+VF)

Digituovimo (EF)
Fashion and Life Style (EF)
South by South West – cross-industry export concept for creative industry companies (EF)

Lifestyle Asia Growth Program
Wood from Finland program
New Markets for Finnish Wood

- Finnish wood has been traditionally exported to other European countries and Finnish wood has also a strong presence in Northern Africa.

- The slowing population growth rate and the moderate economic growth in Europe have started to shift Finnish sawn timber to new markets.

- Asia’s continued economic growth and rapidly growing middle class have increased the demand for Finnish wood for example in China.

- Other target areas include new growing and opening markets in Africa and Middle East.

- Program has been successful; companies participating in the program export of sawn timber to China increased by 87% in 2015.
Wood flows in Finland, 2013

Growing stock (stem) 2 357 Mm³
(47% <20cm, 34% 20-30cm, 19% >30cm)

Forest growth (round wood) 104.4 Mm³
Stock drain 79.2 Mm³
Round wood use 73.9 Mm³
Sawn mill and panel industry 26.3 Mm³
Particle board and other wood products 3.0 Mm³
Particle board and fibre board and pellet industry 0.9 Mm³
Plywood export 0.9 Mm³
Sawn timber domestic use 2.8 Mm³
Sawn timber export 7.2 Mm³
Import of round wood and chips 11.0 Mm³
Round wood export 1.2 Mm³
Import of chemical pulp 1.2 Mm³
Import of paper and board 1.4 Mm³
Reycled paper 1.4 Mm³
Paper and board export 15.6 Mm³
Pulp export 6.7 Mm³
Energy from side streams 14.0 Mm³
Energy production in forest industry 24.5 Mm³
Use of wood in heat and power plants 4.1 Mm³

Janne Keränen & Elja Alakangas 2015

Sources: Luke, Finnish Forest Industries Federation, Customs of Finland, Confederation of Finnish Industries and Paperierryös
Public funding organisations

1. Tekes
   - Tekes funds companies' development projects that aim for growth and business innovation. Research, development and innovation funding is targeted to projects that create in the long-term the greatest benefits for the economy and society. Funding can be applied by companies registered in Finland.

2. Finnvera
   - Finnvera provides financing for the start, growth and internationalisation of enterprises and guarantees against risks arising from exports. Finnvera strengthens the operating potential and competitiveness of enterprises operating in Finland by offering loans, domestic guarantees, venture capital investments, export credit guarantees and other services associated with the financing of exports.

3. Finnish Industry Investment Ltd
   - Promotes entrepreneurship, employment and economic growth through venture capital and private equity investments. FII invests in companies operating in Finland, both directly and through private equity funds. FII invests in rapid growth, internationalisation, spin-offs, major industrial investments, as well as sectoral, corporate and ownership restructurings.

Conclusions

• Global drivers will force the transformation to a sustainable bioeconomy, based on use of renewable raw materials; the change is happening already

• Forest industry has all it takes to meet the changes

• The government has initiated many actions to move bioeconomy forward and meet the +15 Mm³ goal

• Big opportunities require big renewal: the companies need to know their customers’ needs, understand market changes and make the business decisions

• The EU and member states have a common vision on bio and circular economies and there are a lot of plans and activities to speed up the change

• Consumer behavior will define the market. Any product and industry has to compete for consumers’ interest and acceptance. Act sustainably, measure and communicate it.
Thank you!!

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