Drivers for Future Growth of Wood Construction in NE Asia
From the Perspective of Softwood Exporters
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Canada Wood Group

Forest industry & federal/provincial government initiative.

Grow wood usage overseas via:

- Codes and standards development.
- Applied research on innovative systems
- Education to building sector, manufacturers and students.
- Onsite construction support.
- Collaboration with foreign agencies.
- Demonstration of advanced wood structures.
Trends in NE Asia construction

1. Adoption of larger wood structures
2. Strive for Net Zero Energy buildings
3. Favourable planning/zoning developments
4. Challenges – lack of know-how/capacity & domestic competition
Larger Structures

Japan:

• 5 storey wood frame construction commercial reality
• Wood structures can meet fireproof performance standards
• New codes enable use in public buildings including education & social welfare
• Ongoing research to enable mass timber for tall wood buildings
• Generous subsidies leading to surge in CLT manufacture
Japan

Elderly Care, lodging, schools
Larger Structures

China:

• Significant uptake in resorts
• New fire code: 5 story all-wood buildings, hybrid to 7, interior partitions to 18.
• Interest in mass timber to 8+ stories
• Enthusiasm for exposed wood construction
Larger Structures

Korea:
• 4 storey WFC allowed
• Use of hybrid systems
• Strong interest in mass timber & traditional Korean building
• National planning emphasizing greater proportion of low-rise
Korea

Lake Hills Country Club House
Glulam structure @ Soon Cheon City
Path to Net Zero Energy Communities

Japan:
- Low carbon, nuclear phase-out key drivers.
- Target: 2030 all new homes = zero emission: feature hi insulation, high efficiency mechanical systems, photo-voltaic

Korea:
- By 2025 all construction to meet NZE performance levels.

China:
- 13th Five Plan targeting 10 M m2 of ultra-low, nearly zero energy building by 2020.
- Focus on passive measures (insulation & air tightness), high efficiency mechanical systems plus clean energy generation.
- Subsides available now – e.g. Beijing USD 100-150/m2 for NZEB. Elsewhere other incentives like 9% floor area bonus, reduced infrastructure fees etc.
- Working with global partners including Canada, USA, Europe, Japan
- Stepped approach
NZE Building –
Goal is
Commercialization
Favourable Policy Environment

**Japan:**
- Government push on greater use of wood albeit domestic wood.
- ‘Wood First’ policies supported by subsidies.
- Linked to carbon reduction commitments.

**Korea:**
- 5th National Territorial Plan aims to lower building densities.

**China:**
- Fire code on track to allow 8 storey or less wood construction.
- China rapidly ramping up green building requirements.
- Xiong ‘An new area limiting building heights to 40-45 meters.
- Focus on green, ecological community development.
Challenges to Growth of Softwood Exports

Lack of Know-how & Expertise in China & Korea:
- Interest amongst government & companies is high.
- But necessary expertise in design and manufacture especially quality is scarce
- To reach its potential, qualified designers, builders & trades required
- Concerted engagement w. universities, vocational schools & practitioners

Growing Self-Sufficiency in Japan and Korea:
- Post-war plantations in both countries at maturity.
- Particularly in Japan, generous subsidies for forest development and new manufacturing operations.
- Transforming supply options and supply chains.
Thank you!