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Enhancing Sustainability and Economic Viability in Vermont's Forest and Primary Wood Products Vertical

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Five Overarching Goals:

1. Enhance its economic viability by putting more money in the primary forest/wood products supply chain for everyone from the forest owner to the logger and primary forest products manufacturer.
2. Capture value added lost to neighboring states and especially Canada that now rolls out of Vermont on the beds of log trucks.
3. Ease sawmill supply constraints by reversing the long-term decline in Vermont timber harvests.
4. *Harvest what the forest wants to yield*. Propel the sustainable forestry through education, incentives and institution-building.[1]
   - The Pay-off: Vermont forest health and sustainable yields rise over time.

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[1] Sustainability means cutting the worst trees first and growing the best trees to larger diameters—in other words, replace the current practice of "high grading" with one that achieves growing forest inventories over time.

Timbergreen Farm http://www.timbergreenfarm.com/

- Sustainable management that builds up quality, quantity and diversity of forest
- Take smaller, poorer-quality trees first—nurture larger trees of greater value for future harvest
- Annual yield/acre increases, while annual harvest never exceeds annual forest growth
- "Mature tree"—one that has stopped growing—24-30" diameter vs. convention of 14-18" @ breast height (diameter typically grows ½"/yr → must wait additional 12-24 years to harvest a tree)
- Benefits: larger storehouse of value/acre
  - 18" red oak → 210 board feet
  - 30" red oak → > 1,000 board feet = finished floor 31.5 ft^2.
- 1976 → 2001—raised growth rate from 100 bf/acre to 200 bf/acre
- Forecast: 2010→ growth will support harvest of 200 bf/acre; 2030, 300 bf/acre, or 60,000 bf/yr for his 200 acres
- Developed high-value niche market for his logs: "Rustic flooring"—operates a sawmill and his company is involved in floor installation[1]
- Birkmeier Model
  - Max long-term yield—"cut the worst first"
  - Capture the value-added from cultivation through installation

- Revise the list of priorities prevalent in the industry to emphasize sustainability:
  - Forest health
  - Development of natural resources
  - Lumber extraction

5. Shape the industry, rather than allow the industry to shape the stakeholders by creating new market spaces for primary forest products—lumber, flooring, etc.—that build market leverage around the twin cachets of *Vermont* and *sustainably harvested wood products*.

Status Quo:

1. Ownership patterns: Over 70% of Vermont's timber land is owned by non-industrial owners whose behavior is not typically driven by holding values different than the traditional industrial values.
2. Loggers face substantial additional costs that they have difficulty recouping when harvesting logs according to any of the current forest certification systems—SFI, FSC, and Tree Farm.
3. Timber harvests have been declining every year for over a decade.
4. Vermont's sawmills, which are highly supply-constrained, cannot secure the premium prices they require to recoup the additional cost that certification entails.
5. Vermont log exports are growing every year as Canadian buyers, in particular, offer attractive prices and exist as a one-stop shop, buying everything from low-quality wood through veneer.
6. The loss of value-added processing translates into dwindling economic viability for Vermont's primary processors, and, therefore, to the loss of good jobs that pay both benefits and living wages.
7. While not there yet, green products and especially sustainable flooring are becoming watchwords for commercial and residential interiors. The U.S. Green Building Council and its LEED[2] certification are paving the way. "Commercial design firms are champing at the bit to incorporate environmentally friendly floors in their interior designs and, by extension, bring them into their clients' workplaces"[3]

Proposed: A Hardwood Flooring Strategy for Vermont

INTRODUCTION:

Why propose a hardwood flooring manufacturing strategy for Vermont?

1. It is consistent with the goal of propelling sustainable harvesting because it transforms low-value trees into high-value products.
2. The infrastructure is in place—many Vermont sawmills already produce flooring, and we already have one firm capable of pre-finishing flooring, should such a project be added to the portfolio.

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[2] Leadership in Energy and Environmental Design.

[3] Michael Chmieiecki, "Commercial Market Seeing a Surge in Economic Friendly Interiors," www.ntlfloortrends.com, June 11, 2004

3. Under the Sustainable Forest Initiative (SFI) and Vermont Land Use legislation, as well as Vermont Family Forests, a growing number of Vermont's forest owners are already either employing or at least considering employing sustainable harvesting in their timber management programs.
4. Under the collaborative approach proposed below, it offers a means of slowing the outflow of Vermont logs to Canada in the near future.
5. Economics
   - The pre-finished flooring space is a price-driven commodity industry that is dominated by a few major manufacturers in Wisconsin and Michigan, and by the big box retailers, Lowe's and Home Depot.
   - Several Midwestern family forest coops and one family forest company are successfully growing markets and margins for un-finished, so-called rustic and wide plank hardwood flooring—they have escaped the commodity markets by creating new market spaces for their branded flooring.
   - Vermont has, albeit limited, experience and success marketing sustainably harvested wood products to environmentally-conscious customers. Therefore, it is not at all unrealistic to expect that a coherent marketing campaign built around the twin cachets of Vermont and sustainably-harvested wood products could get traction.
   - It is very difficult to have much of an impact on income at the primary end of the processing spectrum when all those involved—landowners, loggers, truckers, processors, and the employees of processors—need to find markets for their product or work year round. This is one of the key advantages of the wood flooring approach. It creates demand in sufficient quantities to have a significant effect on the income of those employed in growing, harvesting, and adding value to low-grade products.
     1. Currently, the primary forest product vertical is a commodity business, where success depends on execution, cost minimization, and competing largely on price alone. Even with certification, primary product markets will continue being commodity businesses. (Neither Home Depot nor Lowe's pay a premium for FSC-certified lumber and mill products.)
     2. Transportation costs are especially significant in the pricing of low-grade (primary) products, and the income of their producers.
     3. A flooring manufacturing strategy improves the viability of primary processors, and the incomes and viability of the jobs those primary processors provide.
        - Increased pricing leverage through marketing a high-value product from low-value logs that can be influenced by branding, certification, and marketing campaigns.
        - Securing higher price for forest owners' smaller, lower-grade logs and incomes for the loggers who produce those logs.

- Raise awareness around and the returns to sustainably managing and harvesting wood from Vermont's forests. (Strengthen forests over time by replacing the current "cut-the-best-first" practice known as high grading with sustainable harvesting—"cutting-the-worst-first."
- Creating year-round markets for primary forest products producers.
- Create year-round jobs that pay living wages and benefits in Vermont's primary forest products producers—sawmills and value-added primary manufacturers.
- Begin keeping and capturing a growing share of the value-added created along the primary forest products supply chain within, rather than beyond, Vermont.

A. COLLABORATIVE STRATEGY WITH VERMONT'S LUMBER MILLS TO DEVELOP A MARKETING ASSOCIATION FOR A BRANDED HARDWOOD FLOORING THAT CAN COMMAND A PREMIUM PRICE

In the course of conducting our research, two distinct variants of a strategy that exploits Vermont's existing infrastructure have emerged. At first our working group wrestled with trying to somehow merge these two approaches into a single pilot. However, it is our view that we are too early in the game as yet. As such, we will recommend building and conducting pilots around two approaches for developing a strategic initiative around identifying a potential market for "character" wood flooring:

- **Vermont forest products organization:** A prototype service-based, low-capitalization, FSC-certification-driven, and lean management strategy.

  Mission: The organization will be a full-service provider: education, stewardship, ecology, timber sales, and marketing of FSC-certified flooring. It will outsource industrial production to established, FSC-certified established VT sawmills and primary processors.

- **Sawmill Collaborative member organization:** Established Vermont sawmills and primary processors as members of an association modeled on that representing the Barre granite and marble producers. The marketing enterprise positions and markets the members' flooring and other value-added products, and chooses where to compete and promote individual mills' products and capabilities.

  Mission: Market unfinished (and possibly pre-finished) flooring that is currently produced in Vermont under a single brand that leverages the twin cachets of Vermont and sustainable harvesting.

B. RECRUITMENT STRATEGY:

National flooring manufacturer establishes presence in Vermont

(Note: To the extent that our eventual success in attracting financial services and especially captive insurance providers to Vermont is a guide, successfully recruiting one or more national flooring firms to establish manufacturing capacity in Vermont involves a long lead time.

Moreover, it is our sense that this lead time is actually a plus, as it provides a window of opportunity that should enable a thorough testing of the viability of one or both of the home-grown tracks to achieving the project's stated goals.)

- Hardwood flooring is currently a classic, price-driven commodity business. While "fashion flooring" is emerging as a marketing concept, the largest Michigan and Wisconsin manufacturers largely compete on price—on a purely commodity-competition basis. Moreover, even though Lowe's and Home Depot have introduced policies that favor merchandising certified flooring, neither pays a single cent in premium for it.
- Point: trying to predicate growing prosperity in the forest/wood products vertical by building leverage in a low-margin commodity business is a fool's game.
- Therefore, the recruitment strategy needs a differentiator; and from the perspective of the big box retailers, whether placing "Vermont made" on the box will provide such leverage is questionable at best.
- But sustainably harvested wood products are resonating increasingly in a growing array of markets.
    - The key is identifying and then developing new market spaces that are populated by customers who will pay for a value proposition built on the twin cachets of Vermont and sustainable management/harvesting.
    - The LEED criteria may create special opportunities for major flooring firms who can offer sustainably harvested flooring to architects and specifiers for commercial construction projects.
    - Major flooring firms are increasingly turning to Web-based marketing strategies, where romancing Vermont and sustainably harvested (even certified) flooring may create new market spaces.
- Recommendations
    - US and global hardwood flooring markets are growing robustly—in the range of 5%-8% annually
    - An in-depth feasibility study is the first step in designing and then implementing a recruitment flooring manufacturer strategy
    - Elements of such a study include:
        - Forestry inventory analysis of the supplies of low-quality wood standing in Vermont forests, plus sustainable yield rates
        - Understanding the drivers of the current commodity-driven market
        - Research targeting discovering and identifying new market spaces into which a recruited national flooring manufacturer might sell exclusively from its Vermont facility
        - A SWOT analysis of Vermont vis-à-vis recruitment candidates