Seventh Generation
A framework to evaluate “Make vs. Buy”

**SELF vs CONTRACT vs PARTNER**

**FINANCIAL**
- **lowest**
  - Initial outlay: high
  - Capital Outlay: high
  - Fixed Costs: high
  - Miscellaneous: high
  - Transportation: high
  - Switching Cost: high
- **low**
  - Initial outlay: moderate
  - Capital Outlay: moderate
  - Fixed Costs: moderate
  - Miscellaneous: moderate
  - Transportation: moderate
  - Switching Cost: moderate
- **neutral**
  - Initial outlay: low
  - Capital Outlay: low
  - Fixed Costs: low
  - Miscellaneous: low
  - Transportation: low
  - Switching Cost: low
- **high**
  - Initial outlay: high
  - Capital Outlay: high
  - Fixed Costs: high
  - Miscellaneous: high
  - Transportation: high
  - Switching Cost: high
- **highest**
  - Initial outlay: highest
  - Capital Outlay: highest
  - Fixed Costs: highest
  - Miscellaneous: highest
  - Transportation: highest
  - Switching Cost: highest

**ENVIRONMENTAL**
- **lowest**
  - Energy Consumption: difficult to regulate
  - Water Consumption: difficult to regulate
  - Emissions (HGs, ODS, SO2): difficult to regulate
- **low**
  - Energy Consumption: easy to regulate
  - Water Consumption: easy to regulate
  - Emissions (HGs, ODS, SO2): easy to regulate
- **neutral**
  - Energy Consumption: moderate to regulate
  - Water Consumption: moderate to regulate
  - Emissions (HGs, ODS, SO2): moderate to regulate
- **high**
  - Energy Consumption: difficult to regulate
  - Water Consumption: difficult to regulate
  - Emissions (HGs, ODS, SO2): difficult to regulate
- **highest**
  - Energy Consumption: very difficult to regulate
  - Water Consumption: very difficult to regulate
  - Emissions (HGs, ODS, SO2): very difficult to regulate

**CULTURAL**
- **lowest**
  - Manufacturing/Innovative
    - Manufacturing/Innovative: low
    - Manufacturing/Innovative: neutral
    - Manufacturing/Innovative: high
    - Manufacturing/Innovative: highest
- **low**
  - Manufacturing/Innovative: low
  - Manufacturing/Innovative: neutral
  - Manufacturing/Innovative: high
  - Manufacturing/Innovative: highest
- **neutral**
  - Manufacturing/Innovative: low
  - Manufacturing/Innovative: neutral
  - Manufacturing/Innovative: high
  - Manufacturing/Innovative: highest
- **high**
  - Manufacturing/Innovative: low
  - Manufacturing/Innovative: neutral
  - Manufacturing/Innovative: high
  - Manufacturing/Innovative: highest
- **highest**
  - Manufacturing/Innovative: low
  - Manufacturing/Innovative: neutral
  - Manufacturing/Innovative: high
  - Manufacturing/Innovative: highest

**BUILD vs RENOVATE vs LEASE**

**FINANCIAL**
- **lowest**
  - High initial outlay
  - Moderate initial outlay
  - Low initial outlay
  - Lowest initial outlay
- **low**
  - High initial outlay
  - Moderate initial outlay
  - Low initial outlay
  - Lowest initial outlay
- **neutral**
  - High initial outlay
  - Moderate initial outlay
  - Low initial outlay
  - Lowest initial outlay
- **high**
  - High initial outlay
  - Moderate initial outlay
  - Low initial outlay
  - Lowest initial outlay
- **highest**
  - High initial outlay
  - Moderate initial outlay
  - Low initial outlay
  - Lowest initial outlay

**ENVIRONMENTAL**
- **lowest**
  - Energy Consumption: difficult to regulate
  - Water Consumption: difficult to regulate
  - Emissions (HGs, ODS, SO2): difficult to regulate
- **low**
  - Energy Consumption: easy to regulate
  - Water Consumption: easy to regulate
  - Emissions (HGs, ODS, SO2): easy to regulate
- **neutral**
  - Energy Consumption: moderate to regulate
  - Water Consumption: moderate to regulate
  - Emissions (HGs, ODS, SO2): moderate to regulate
- **high**
  - Energy Consumption: difficult to regulate
  - Water Consumption: difficult to regulate
  - Emissions (HGs, ODS, SO2): difficult to regulate
- **highest**
  - Energy Consumption: very difficult to regulate
  - Water Consumption: very difficult to regulate
  - Emissions (HGs, ODS, SO2): very difficult to regulate

**CULTURAL**
- **lowest**
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
- **low**
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
- **neutral**
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
- **high**
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
- **highest**
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low
  - Owner’s risk and liabilities: low

This framework is meant to be used as a tool when Seventh Generation is making its decision and it incorporates both financial and sustainability criteria. The model is meant to help clarify the various options available, present likely pros and cons of each, and shape the quantitative assessment of each.

To fully evaluate the various options, Seventh Generation will need to be able to use its current production methods as a benchmark. An initial Life Cycle Assessment (LCA) of the liquid products, will also demonstrate the company’s sustainability “hot spots” along the production chain, and then concentrate its efforts on areas where it can have the most impact.

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