

# 9. Have other resources been used appropriately?

## Sourcing and legality aspects

### Origin

Where do the products come from?

### Information accuracy

Is information about the products credible?

### Legality

Have the products been legally produced?

## Environmental aspects

### Sustainability

Have forests been sustainably managed?

### Special places

Have special places, including sensitive ecosystems, been protected?

### Climate change

Have climate issues been addressed?

### Environmental protection

Have appropriate environmental controls been applied?

### Recycled fiber

Has recycled fiber been used appropriately?

### Other resources

Have other resources been used appropriately?

## Social aspects

### Local communities and indigenous peoples

Have the needs of local communities or indigenous peoples been addressed?



## 9. Have other resources been used appropriately?

Efficiency in the use of water, raw materials and energy, paired with demand reduction, is another aspect of sustainable procurement.

### SOURCE REDUCTION

Source reduction is an important strategy for reducing the consumption of raw materials while maintaining efficiency and usability of the products. Source reduction goes beyond recycling by attempting to reduce negative environmental impacts throughout the entire life cycle of the product. Design, manufacturing, usage, sales (including packaging), and final disposal are all part of source reduction (Box 11).

Benefits of source reduction include:

- Decreasing environmental impacts including a decrease in pollution and toxicity and decrease in the use of non-renewable resources.
- Lower costs, and increased economic benefits throughout the production process:
  - Harvesting operations (more efficient and targeted harvesting)
  - Manufacturing (less raw materials to process)
  - Product management (collection, transportation, packaging and storage).

The benefits of source reduction should be considered in light of consequences for performance and usability. A lower-performing paper using fewer resources per unit of product may create a false sense of economy of resources if it requires more units of the product to accomplish the task. This is particularly true for some products that undergo specialized treatment and processing to enhance performance and usability (e.g., tissue with additives to soothe the skin, stronger and more durable paper, and so on).

### EFFICIENCY

Besides wood, energy remains the most expensive part of the manufacturing process for the pulp and paper industry. While energy efficiency has improved dramatically in the last few decades, the manufacturing processes of many products still consume considerable

amounts of energy. Energy reduction is of strong interest to the forest products industry.

There are pulp mills that burn residual biomass to both meet their own energy needs, and to sell surplus energy to the grid. Most mills do not, however, either because they have not been equipped with sufficiently modern technology or because the production process does not generate biomass residue as a by-product (such as mechanical pulping).

### DEMAND REDUCTION

Demand reduction can be a positive and important element of a sustainable procurement strategy. Reusing the back side of paper, using double-sided printing, using lighter products, etc. are all ways to reduce wasteful consumption.

#### Factors to consider regarding efficiency, source and demand reduction

When it comes to transportation, energy consumption depends on the distance, location, and even condition of the facilities and transportation routes. It is advisable that a company first identify the areas of priority where it has more leverage and can have a positive impact without compromising the quality of the products.



*Wood transportation vehicle in Germany*

## SELECTED RESOURCES: SOURCE REDUCTION

### Procurement requirements

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LEED	Rates the proportion of building materials that are reused.
Green Globes	Rates the proportion of building materials that are reused.
Japanese Government Procurement Policy	Requires simple packaging.

### Resources to assess requirements

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Paper Profile	Provides a summary of the electricity procured for both the pulp and paper mills in relation to the amount of pulp used in the paper.
GPN	Prompts user to assess whether or not the product is needed before purchasing. GPN also prefers products where the manufacturing and distribution processes minimize the use of resources and energy.
EPAT®	Rates the recyclability and compostability of other materials (wax, plastic and metal), as well as the amount of water and energy used throughout the manufacturing process.
WWF Tissue Scoring	Rates whether companies have set a vision and targets for the production process to minimize the use of non-wood inputs (water, energy and additives), and maximize the use of biomass and other renewable energy.
WWF Guide to buying paper	Provides background information and advice to reduce paper consumption.

## Box 12. Life cycle assessment

A life cycle assessment (LCA) is a tool to objectively evaluate the overall environmental impacts associated with a product. LCA assesses the product and the inputs (energy, raw materials, water, etc.) and outputs (pollution to soil, water, oil, etc.) in a product's life cycle from raw material extraction to final disposal.

LCA is not a risk assessment tool because it stops at quantifying emissions without assessing their impacts. Additionally, LCA is a data-intensive methodology and data limitations (out-of-date, lack of data, or omissions) are common.

LCA is a useful tool to identify, prioritize and target actions to minimize negative environmental impact. LCAs can also be used to compare the environmental impact of alternative raw materials.

A number of LCAs have been completed for various wood-based products including:

- Wood as a building material
- Wooden furniture
- Comparison between single-use diapers with absorbent gels, commercially laundered cloth diapers, and home-laundered cloth diapers
- Comparison of wood, concrete, and steel as building materials
- Comparison between using wood, aluminum and plastic to build a video/TV unit
- Comparison between solid wood, linoleum and vinyl as raw materials for flooring
- Comparison between wood, PVC and aluminum as raw materials to build window frames.

Some of the drawbacks of LCAs include:

- They account for environmental factors but not economic and social aspects
- LCAs do not address the renewable aspect of wood
- LCAs are undertaken on a case-by-case basis and thus, limited by the boundaries of the assessment.

A list of resources on LCA can be found in Section III.



