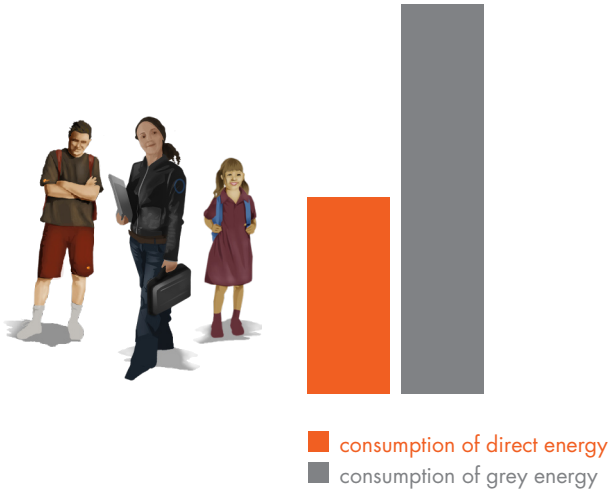
Fact sheet

Grey Energy



What is grey energy?

Grey energy is the hidden energy associated with a product, meaning the total energy consumed throughout the product's life cycle from its production to its disposal (see example in appendix). On average, a household in Europe consumes twice as much grey energy as direct energy (heating, light, electrical appliances, etc.)!

Yet while grey energy accounts for a significant part of the total energy consumed and is associated with all the products we buy, consumers often know very little about how much grey energy is associated with the products they buy, and even have misconceptions.

For example, most people think that modern cars require less energy to manufacture, run and maintain than cars manufactured several decades ago. However this is only true if you take fuel consumption into account. Modern cars are often equipped with systems such GPS, ABS, power windows and rear view mirrors, CD player, onboard computer, etc. – all of which require considerable amounts of energy to produce.

Knowing how products are manufactured is essential to making environmentally-friendly choices when you go shopping.

How is grey energy calculated?

To calculate the grey energy of a product, you must take into account the energy associated with:

- extracting and transporting raw materials used to make the product;
- transforming these raw materials and manufacturing the final product;
- packaging the product;
- shipping the product to retailers;
- use of the product;
- collecting and recycling/disposing of the product.

The product therefore needs to be looked at "from cradle to grave", or better yet, "from cradle to cradle" if it can be recycled.

What can you do?

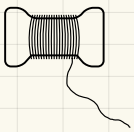
In order to reduce your grey energy consumption, you can:

- print documents only when necessary and reduce the environmental impacts of printing by printing on both sides of paper and by optimizing layout;
- eat less beef (producing it requires energy and polluting fertilizers; cows also emit methane when they digest grass);
- choose products with little or no packaging (buying in bulk whenever possible often helps as you receive more product for less packaging);
- reuse (even if it's for a different use) and recycle products whenever possible;
- buy local and seasonal products (transporting them produces a lot of greenhouse gas emissions).

More detailed information can be found in the Action Sheets!

Let's look at the life cycle of a cotton T-shirt made in Asia and sold in Europe. Which stages in its life cycle require energy?

1. Growing the cotton: This step requires a lot of water, fertilizers, defoliants and pesticides! About 25% of pesticides used in the world are used for growing cotton.



2. Treating the cotton (spinning, dyeing, bleaching,...).

3. Shipping cotton to the factory.

4. Manufacturing the T-shirt.

5. Shipping the T-shirts to European consumers.

6. Use by the consumer during the T-shirt's life: washing, ironing,...

7. End of life: disposal or re-use (give it as a hand-me-down, donate it to charity or second-hand store, use it as a cleaning rag if it's unwearable)...