



Future skills & sustainable development
in the Green Salon

Module 1 – Environment and Recycling

Student manual



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Lesson 3

Reducing consumption (energy, products, paper, etc.)

Introduction to this lesson

The environment is necessary for our civilization and must be preserved in order not to mortgage our future; Science has shown that the uses and customs of today would lead to a problem of very difficult solution. Until recently, the company and the environment were confronted. This perspective has begun to change since the introduction of the concept of "sustainable development".

Both company and environment are bound to understand each other, and this understanding goes through what we now call "eco efficiency" (reduction of the environmental impact in relation to the volume of production obtained). In order to achieve sustainability, we must respect the environment and not demand more raw materials than it can offer, that is why reducing consumption is sustainable but also helps to get benefits from saving, so it is a win-win situation.

3.1 Reducing consumption... what for?

Implementing a green salon may cost 15 to 25% more than a conventional one, depending on the equipment installed, but this is only the initial investment because the medium or long-term economic savings, plus the profits coming from new customers interested in an environmentally friendly service, are able to amortize and overcome the extra investment in a short time.



For any hair and beauty company to work, it requires an infrastructure that undoubtedly has costs. Of these, some are fixed, in which we cannot or should not intervene to reduce them, such as rental payments, local taxes, or salaries and Social Security of employees; however, there are other expenses such as consumption of water and electricity, products, etc. that we can administer to use them more efficiently, since assuming certain ecological habits in our daily work, not only save us thousands of euros at the end of the year, but helps to conserve the planet.

3.2 Water consumption

In hairdressing salons, the estimated average water consumption is 250 litres/day and employee, while in beauty salons it goes up to 360 litres/day and employee, seen in a different way, a hairdresser with four working stations usually spends more than 100.000 litres of water per year, enough to take a daily 15 minutes shower for 10 years.

With such a high expenditure, the use and reuse of water are two very important aspects to take into account in a green business, because by keeping some good habits and applying technology consumption can be reduced drastically.

The following is a list of possible types of intervention:

- Use flow restrictors in all taps, which reduce the flow but maintain the pressure and, therefore, its efficacy.



- Avoid dripping of faucets or toilets. Although it does not seem much, avoiding the dripping of taps can save about € 12 per year and that of cisterns, several hundred euros.
- Close faucets when not in use. Leaving the tap open while applying the shampoo or conditioner is an unnecessary expense.
- Install dual-flush toilets with two buttons or handles to flush different levels of

water, with them, the person who handles the mechanism regulates the consumption.

- Never use the toilet as a wastebasket, as it is an illogical waste of water. Remember that normal toilets use between 9 and 12 litres of water in each use.
- The washing machine must be used with full load and, when possible, with the saving program. Choose a model that is efficient, since, while an old washing machine consumes about 80 litres per wash, the newest class A do not exceed 20 litres.
- Use Aquareturn® type devices on the faucets, which avoids having to open them while the water is heating, as it retains water and warns with a beep to open the faucet once the right temperature has been reached.
- Install a flow meter to be aware of the need to control consumption.
- Grey water recirculation systems are becoming more and more common in new companies. The grey water is obtained from the washing station, washing machine, etc. This wastewater can be carried to a small reservoir, which subsequently feeds the toilet cistern.
- A pricey but worthwhile long-term investment is to install a rainwater collection system. The rainwater is clean and accessible, and could be used safely at the washing stations, for doing laundry and for toilet flushes.

3.3 Energy consumption

Although energy is essential for hairdressing salons to be able to provide services, it is also true that there is a need to rationalize the global energy consumption, an issue that must be a priority today.

There are multiple sources of energy, some little and others very sustainable, so it is important to know those in the market, and to choose the least polluting ones.

On one side there are the non-renewable energies; they come from fossil fuels and are so called because, either it cannot be replaced, or it takes much longer to replace it than it takes to consume it, and therefore, some day they will be finished. The main ones are nuclear energy and fossil fuels such as oil, natural gas or coal.

On the other, renewable those that are unlimited as biomass, geothermal, wave or solar. energies, also divided into two polluting (or



there are the energies, which are obtained from natural sources, such as biofuels, wind energy, hydroelectric, tidal, These renewable called green, are categories: non-clean) and pollutants.

The non-wind, blue power (freshwater/saltwater), geothermal (Earth heat), hydropower (rivers and freshwater streams), tidal (seas and oceans), solar and wave energy (from the waves). Among the pollutants are those produced from organic matter or biomass, and can be used as fuel (wood or solid plant material) or converted into bioethanol, biogas or biodiesel. This type of energy emits carbon dioxide, greenhouse gas, and sometimes soot and other solid particles.

polluting ones are energy or osmotic

The reality is that the choice of the energy source used in our business depends almost exclusively on our electricity supplier, unless it is decided to invest in solar or photovoltaic panels, but on a daily bases, small facts can avoided, as they consume more energy than necessary, such as large windows, open doors with the consequent consumption of heating or air conditioning, misuse of lighting, etc. It is important to know the measures to be taken to improve consumption habits and thus reduce spending.

3.4 Electrical Installation

The consumption management measures that can be taken directly related to the electrical installation are:

- Have a good natural lighting in the salon. It is important to use sunlight whenever possible, so it is essential to install stained glass or skylights, as well as transparent or translucent glass panels to separate spaces and make the most of this lighting.
- Maximise natural lighting in your salon by avoiding curtains and clearing windows of bulky elements, using bright paint to make the most of sunshine, and positioning lighting carefully, for example, near mirrors to double its capacity of lighting.
- When it is necessary to use light bulbs, it is preferable to use LED light bulbs, as they consume one tenth of the energy of halogen light bulbs to deliver the same light levels and last mucho longer.
- Make sure to always switch off lights in empty rooms or areas where they are not needed all the time and install motion-sensitive lighting in areas such as bathrooms, storage rooms, etc.
- Install solar panels. It is a great investment in the medium and long run, because depending on the budget and the options chosen, these could be used not only to heat the water but also to supply other energy needs of the salon.



3.5 Appliances and equipment.

Measures to be taken in order to improve the management of the consumption related to the use of the essential equipment in a hairdresser salon, could be:

- Unplug all appliances that are not used frequently, such as coffee machines or microwaves.
- Switch appliances off or unplug them at the wall rather than leaving them on standby.
- Avoid keeping appliances switched on in stand-by mode, even though it may not seem like it, they are also consuming energy.
- At night, unplug all electrical equipment unnecessary at those times, like dryers, hair irons and so on.
- Keep the computers in saving mode while they are not being used (the screensavers also consume energy) or turn them off if they are not going to be used assiduously.
- Replace the old computer with a new one, greener and, if possible, with longer battery life and LED backlighting screens. There is an Energy Star eco-label, which indicates which computers, monitors, photocopiers, faxes, etc.) are efficient in energy consumption.
- Another option is to replace the classic desktop computer with a laptop because its energy consumption is much lower.
- Avoid batteries whenever possible and, if it were not possible, use rechargeable batteries.
- Ensure that equipment is energy efficient; both in dryers, irons and other electrical elements, there are "green" options that get the same power with much lower consumption.
- Reduce water temperature. When washing hair, suggest a slightly cooler temperature to your client, it will probably not make a difference for the customer and you can even describe the multiple benefits of using fresh water. A reduction of 2°C in the wash water temperature can save more than € 100 per year.
- Always use A+++ appliances, as they are the most energy efficient, spending and contaminating much less.

- When using the washing machine, dryer or similar appliances, make sure do it at full load.
- Whenever possible, let your towels dry naturally instead of using the tumble drier.



3.6 Heating and Air Conditioning

Air conditioning can, not only represent up to 15% of total energy consumption, but it is also a great generator of carbon dioxide. There are different ways of adapting air conditioning to maintain sustainable consumption:

- The so-called "solar cooling" is a system of solar panels that includes heating, cooling and domestic hot water. This system minimizes the environmental impact since it works with lithium bromide and water.
- When having a normal air conditioning system, just adjusting the thermostat by lowering or raising it by two or three degrees can achieve great savings. Each degree (20°C would be the ideal inside temperature in the wintertime, and 26°C in the summertime) can save about 50 euros per year.



3.7 Product consumption.

In hairdressing salons, a great variety of products for the care and conditioning of the hair and for manicures and pedicures are used. A large number of these products contain substances that are dangerous to the environment (e.g. dyes, ammonia, persulfates...) and generate a large amount of waste, some of which are impregnated with product (packaging, gloves, cotton, aluminium foils...) or directly contaminate water and air (hair spray, shampoo, nail polish, etc.).

In addition to this, many of these products are bought from suppliers that are very far from the point of consumption and that transportation also contaminates.

Therefore it is necessary to select carefully which are the products to be used in the salon. Some tips would be:

- Use, wherever possible, local suppliers. This will not only reduce pollution but also contribute to the development of your environment.
- Check on the labelling of the cosmetics, their effects on the



environment and tips for their elimination.

- Use dispensers to consume the minimum amount required for an appropriate result.
- Manage your stock efficiently. Buy only what you need and not based on discounts by rappels or advertising campaigns.
- Recycle, reuse and reduce the use of packaging.
- Try to use biodegradable products and ecological cosmetics. There are more and more in the market and are as effective as traditional ones.
- Use towels, uniforms and customer protection layers made of environmentally friendly cotton or bamboo fabrics.
- Replacing aluminium foils for plastic foils called meche to use instead of during the colour process is an option, as the standard plastic meches are easier to recycle than aluminium foils.

Other consumption and conclusion.

Every small effort for saving, in the end, not only improves the economy of the company but also reduces waste and pollution and, ultimately, takes care of the environment. Therefore, however insignificant they may seem, they are all important.



- Avoid chemical and aggressive cleaners and detergents. Choose water-only cleaning cloths, specially designed to capture 99% of all dirt and bacteria, these cloths simply require water to deliver a high level of cleaning, saving the cost of buying cleaning products as well as reducing allergens in the salon.
- If necessary, natural soaps are very effective, less polluting and much cheaper.
- Invest in tablets. Hairdressing salons spend hundreds of euros on magazines a year, with the added waste of paper. Using tablets not only prevents the use of paper but also allows you to download many free magazines and cheaper versions than printed ones, which can save the cost on subscriptions.

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At Wella they believe in the beauty of everyday commitment – the little things that, over time, can have a big impact – both in the salon and outside. For this reason, they launched, Wella's sustainability program to partner with those who inspire each other every day, and, together, challenge the way we think about our impact on the planet. They are positive that you can build your business while reducing the environmental footprint. This is the manifesto of their commitment. Keep surfing their web to find their virtual salon (<https://www.wella.com/professional/jp-JP/virtual-salon#page>), tips, and experiences of world famous stylists.

- <http://www.loreal.com/media/news/2011/may/l%E2%80%99or%C3%A9al-inaugurates-the-hairdressing-salon-of-the-future>.

In this article, you can read about L'Oréal's Green Academy in Madrid, Spain. The only one of its kind in the world, which combines the application of the most modern technologies and the use of environmentally-friendly materials to establish the basis of green hairdressing for future generations.

- www.ecohairandbeauty.com

The aim of the eco hair and beauty project is very close to Green Salon Project, which is to embed sustainability in the hairdressing curriculum. They do it by training the trainers, equipping them with knowledge and skills relating to green issues within this sector and helping them integrate it into every stage of training. They are also developing a Sustainable Salon Certificate.