# STELL/MCCARTNEY

2015 Environmental Profit and Loss Account

### 2015 Stella McCartney Environmental Profit and Loss Account

We are happy to share for the first time the results of our Environmental Profit and Loss. Stella McCartney's global 2015 Environmental Profit and Loss (EP&L) account is estimated to be €5.5m.

The EP&L is a form of natural capital accounting that measures and monetises the negative and positive impacts on the environment generated by a company's activities – not just within its own operations, but also across all of its supply chains. It is an innovative tool that goes far beyond traditional environmental reporting, enabling us to make better decisions. It provides us with a clear quantified understanding of our impacts.

The EP&L analyses six major categories of environment impact (greenhouse gas emissions, air pollution, water pollution, water consumption, waste, and changes in ecosystem services associated with land use change) across all of our supply chain and our own operations, starting with the production of raw materials through to the sale of products to the customer.

In 2013 we completed our first EP&L. Since that time it has become the tool that we rely on to assess our environmental impacts; we use it to inform our product design, sourcing decisions, manufacturing, and research and development.

After three years of working with our supply chains and using the EP&L methodology, we decided that it was time to share the results of our EP&L. With our 2015 results we feel that we have a complete picture of our impacts across our supply chain, this is why we have made the decision to release these results.

Although our overall EP&L has increased slightly over the past 3 years, when you break this figure down into impact per kilogram of material, you find a significant reduction. In 2013 our average impact per kg of material used was  $\notin$ 11.82, in 2014 it was  $\notin$ 9.76, and in 2015 it was  $\notin$ 7.69 (illustrated in Figure 1). This represents a 35% reduction in environmental impact per kg of material used over the past 3 years. This is due largely to changes we have made in how and where we source our raw materials.

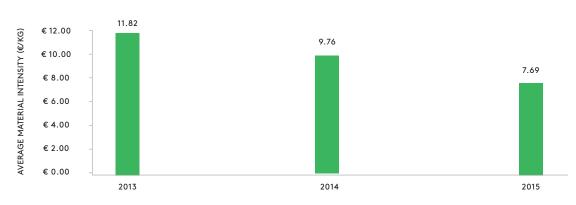


Figure 1

# Natural Capital and the Environmental Profit and Loss Account

Natural capital is "another term for the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals)"<sup>1</sup> that provide the ecosystem services<sup>2</sup> that we as humans rely on. Natural capital is one of several other commonly recognized forms of capital. Other more familiar forms of capital include financial, human and intellectual capital. "Natural capital supports all of the other capitals by providing essential resources, that support a healthy planet and underpins thriving societies and prosperous economies"<sup>1</sup>.

Every year our planet's natural systems provide an estimated \$72 trillion worth of 'free' goods and services<sup>3</sup>. This includes more obvious services such as our food, water, fibre, building materials and medicines as well as less visible services such as natural flood control, carbon sequestration and climate regulation.

Stella McCartney does not own nor does it control significant stocks of natural capital. However, similar to all business' we benefit from the ecosystem goods and services that they provide and we are interested in how our activities impact natural capital, in part because we want to mitigate the impact that we have.

The EP&L is a tool that helps us identify and account for the value of natural capital to our business and the impact that we have on it through the operation of our business and production of our products. The values in the EP&L are expressions of the worth and importance of the benefits that people gain from the environment. These values are human centric; they do not capture the intrinsic right, independent of any human wants or needs, that nature has to exist which is beyond the realm of economics.

It is, however, possible to value small changes in the quality or quantity of the benefits we receive from nature. We believe that by valuing these changes ("losses" or "profits") we are better able to understand and address these impacts in the context of our business and prioritise action to develop a more resilient business.

# Environmental Profit and Loss – Methodology

The development of the EP&L has been led by Kering, with the support of PwC, and has involved valuable input from a huge range of sustainability experts from within academia and business<sup>4</sup>.

The objective of the EP&L is to understand the impact on people's wellbeing as a result of changes in the environment and from various business activities and then to express these impacts in monetary terms. An EP&L works by using welfare economics to place a monetary value on the changes to the environment caused by a business.

<sup>&</sup>lt;sup>1</sup>The Natural Capital Coalition — www.naturalcapitalcoalition.org/why-natural-capital/natural-capital.html

 $<sup>^{\</sup>rm 2}$  Ecosystem services are the flow of benefits provided by natural capital to people.

<sup>&</sup>lt;sup>3</sup> http://www.corporateecoforum.com/valuingnaturalcapital/offline/download.pdf

<sup>&</sup>lt;sup>4</sup> Examples of this are the Kering EP&L Expert Review of the initial methodologies in 2012 and another expert group reviewed the proposed methods for accounting for Profits in 2014 - these reports can be found at kering.com.

There are three parts to this:

- 1 Quantifying the environmental footprint of a business' direct operations and supply chain through the 6 impact areas: greenhouse gas emissions, air pollution, water pollution, water consumption, waste disposal, and changes in ecosystem services associated with land use change.
- **2** Estimating the likely environmental changes that result from these emissions or resource use (eg. climate change).
- **3** Valuing in monetary terms the change in wellbeing of the people affected by these environmental changes (eg. health impacts, access to clean water).

To measure our environmental footprint, we collect three types of primary data from within our business and our suppliers:

- 1 Materials data: what materials we used, how much of each material we used, and from where we sourced our raw materials;
- 2 Financial data: how much we spent with our suppliers;
- **3** Environmental data: environmental data from our suppliers' sites and our own direct stores, offices, and warehouses.

This data is then combined with secondary data from Life Cycle Assessments<sup>5</sup> (LCAs), Environmentally-Extended Input-Output (EEIO) models<sup>6</sup> and industry statistics. EEIO analysis is combined with our financial data to model the impacts of activities required to support our core operations and manufacturing (e.g. the production of machinery).

To estimate the changes to human wellbeing that result from our emissions and resource use, the EP&L valuation methodologies<sup>7</sup>, developed by PwC, take into account the local context of our activities. This is important because a tonne of air pollution emitted in an urban setting will have a greater impact on people when compared to a tonne emitted in a rural setting – as it affects more people in densely populated areas.

A more detailed explanation of how the EP&L was developed and the methodology behind it can be found in Kering's 2013 EP&L Methodology and Report, which can be downloaded here: http://www.kering.com/en/sustainability/media-library

# 2015 Environmental Profit and Loss Results

The EP&L has shown us that our environmental impact is most highly concentrated at the raw material stage. Figure 2 illustrates how our impacts are spread across our supply chain. It clearly illustrates how our most significant impacts are generated in the supply chain (90%) and in particular from the production of raw materials. Raw materials represent 57% of our total E P&L. Our own direct operations represent only 10% of our impact. This imbalance of impact makes it clear that our primary focus need to be our reduction efforts in our supply chain, however this is made complicated by the fact that we do not own the factories or farms that we rely on to produce our products and, further, these suppliers can sometimes be shared by 100s of other companies. This does not weaken our resolve but it does add complexity to the task at hand.

<sup>&</sup>lt;sup>5</sup> Life-cycle assessment is a framework through which the environmental emissions and resource use relating to a specific product or process can be estimated.

<sup>&</sup>lt;sup>6</sup> Environmentally extended models combine research into the environmental aspects of each sector in an economy with the economic input-output tables. This enables the overall environmental impacts associated with the expenditure of a company to be modelled.

<sup>&</sup>lt;sup>7</sup> PwC's valuation methodologies can be found at: www.pwc.co.uk/naturalcapital

Our E P&L balance of €5.5m for 2015 means we still have much work to do towards reducing the negative impacts we have on the environment. We will do this by working closely with our suppliers and collaborating with our peers and industry partners (such as Canopy and the NRDC). However, our decision to not use leather in our products already gives us a head start.

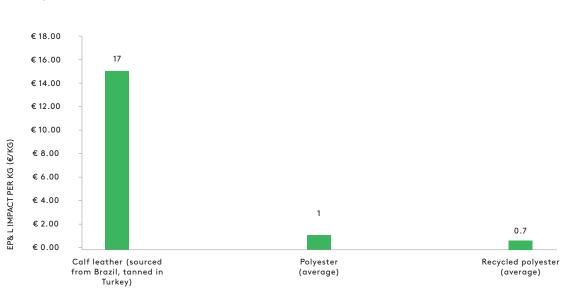
	TIER 0	TIER 1	TIER 2	TIER 3	TIER 4	
	STORES WAREHOUSE OFFICES	ASSEMBLY	MANUFACTURING	RAW MATERIAL PROCESSING	RAW MATERIAL PRODUCTION	
AIR POLLUTION						
Ĺ	€87	€31	€65	€128	€230	10% € 542
GREENHOUSE GAS EMISSIONS						29% €1,578
$\bigcirc$	€321	€213	€352	€393	€300	
LAND USE	•	•	•	•		20% €1,118
Çφ	€21	€27	€49	€43	€979	
WASTE		•			•	5% € 302
Ŵ	€48	€55	€126	€51	€22	
WATER CONSUMPTION		•		•		8% € 465
$\Diamond$	€55 €54	€27	€69	€22	€293	
WATER POLLUTION	•	•	•			27% €1,497
∆°.	€32	€9	€15	€145	€1,295	
TOTAL	10% €562	7% €363	12% €676	14% €782	57% €3,119	100% €5,503

# Figure 2

Stella McCartney is a vegetarian brand that has never used leather, fur, skins or feathers in our products. This is a decision that we have always stood by both for ethical and environmental reasons and the EP&L for the wider Kering business that does use leather has helped to further highlight the environmental impact leather has. Through the E P&L we have been able to more directly compare the impact of the synthetic alternatives that we use to the impacts of leather use.

Leather impacts are driven by land use and greenhouse gas emissions associated with animal rearing, as well as the energy use and water consumption requirements of tanneries. In Brazil for example, the cattle industry has been a driver of deforestation – resulting in a loss of important ecosystem services. Additionally, it is inefficient in terms of production per hectare. As a result, leather from Brazil has very high environmental impact per kg, as shown in Figure 3, when compared to synthetic alternatives.

The synthetic materials we use as alternatives to leather contributed only 2% to our overall 2015 EP&L. Although our choice to avoid leather enables us to have a lesser impact than those that do use leather on the whole, we openly acknowledge that the synthetic alternatives are not without environmental concerns. We are working to reduce the impact of our alternative materials by using recycled and bio-based materials. The EP&L has shown us that the majority of the impacts associated with synthetic fibres are from the processing of oil into yarn. This means that much of the impact of virgin polyester can be avoided through the use of recycled alternatives—illustrated by Figure 3.

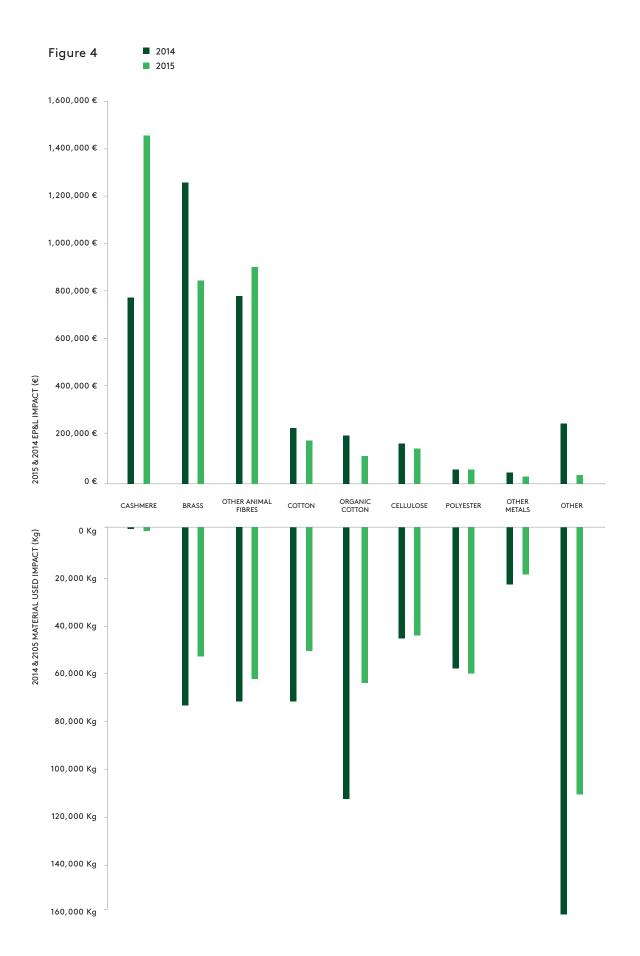


#### Figure 3

#### How we are using the EP&L in practice

The 35% reduction of average impact per kilogram of our materials was achieved by re-thinking how we source key raw materials. Since 57% of our environmental impact is concentrated at the raw material stage, we began there. We are endeavoring to take control of the sourcing of our key raw materials by working directly with those suppliers who are the very furthest back in our supply chain. Through a process of investigation, communication and reporting, we are gaining an unprecedented level of transparency.

The EP&L has also highlighted some areas of significant impact that would have otherwise remained hidden and unexplained. Cashmere is a great example. Figure 4 shows our 2014 and 2015 raw material impacts as compared to kg of materials used. In 2014 cashmere accounted for 42% of our environmental impact at the raw material stage, despite making up only 0.1% of our material usage. In 2015 the percentage decreased to 24% because we had begun to use regenerated cashmere. During 2016 we replaced all of our virgin cashmere with regenerated cashmere, and we expect to see even more significant reductions in the 2016 results.

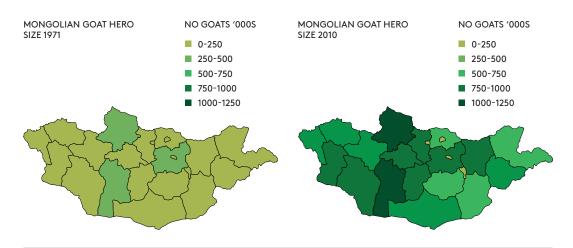


Of all the raw materials we use, cashmere has the highest impact per kilogram—roughly 100 times the impact of wool. Figure 5 illustrates the impact per kilogram of cashmere compared to wool and regenerated cashmere. When compared to virgin cashmere, regenerated cashmere has an 87% reduction in impact, which is primarily why we decided to switch to it <sup>8</sup>.

#### €1,200 1146 €1,000 EP& L IMPACT PER KG (€/KG) € 800 € 600 € 400 € 200 144 11 € 0.00 Cashmere Regenerated Wool (average) cashmere (average)

The high-impact intensity of cashmere is primarily due to two key drivers: the small quantities of fibre harvested from a goat in a year and the land needed for the goats. The best quality cashmere is sourced from mountainous areas in China and Mongolia, where a single goat will produce only 150 to 250 grams of high quality cashmere per year. Sheep can typically produce more than 7 kg of wool per year. This in combination with two decades of rapid market expansion for cashmere, has driven a four-fold increase in the number of goats in areas like Mongolia (Figure 6). This in turn has led to significant over-grazing and desertification of the grasslands. The loss of the functional grassland ecosystems is having significant impacts on native wildlife that depend on these systems. These impacts are also being felt by people far beyond Central Asia since the degraded grasslands contribute to dust storms and add to air pollution problems in Beijing and beyond.

#### Figure 6



<sup>&</sup>lt;sup>8</sup> For more information on our switch to regenerated cashmere please visit our website at http://www.stellamccartney.com/ experience/en/regenerated-cashmere/.

# Figure 5

These reasons are why we made the decision to phase out the use of virgin cashmere in our products, and while we are happy to use regenerated cashmere for the time being we don't plan to just walk away from the social and environmental challenges of cashmere production. We applaud efforts, for example, of the Sustainable Fiber Alliance in Mongolia who are training the new generation of herders and aiming to reverse the negative effects of the cashmere industry in the region. We believe that it is the responsibility of companies using cashmere to help fix the problems that were created by the industry.

Cashmere is just one example of how we have used the EP&L to better inform our sourcing decisions. We are using the EP&L to evaluate how we source all of our key raw materials. Most importantly, the EP&L has forced us to truly, and thoroughly, get to know our supply chains. Since we began using the EP&L, we have gained traceability to farm level for many of our key raw materials such as viscose, wool and cotton.

# What's Next

"Our current EP&L would be most accurately be described as an account of our 'losses' since all businesses have negative impact on the environment. We are, however, striving to balance our accounts. We are working towards projects and sources that would account for profits while delivering real benefits for the environment." Fredrick Lukoff, CEO

"Over the past three years we have focused heavily on reducing our environmental impact and we will continue this effort. In addition to researching new ways to reduce impacts, we are also beginning to move towards transitioning away from merely doing less bad, to doing measurable good. We have many exciting projects in the pipeline and looking forward to sharing them in the future." Stella McCartney