

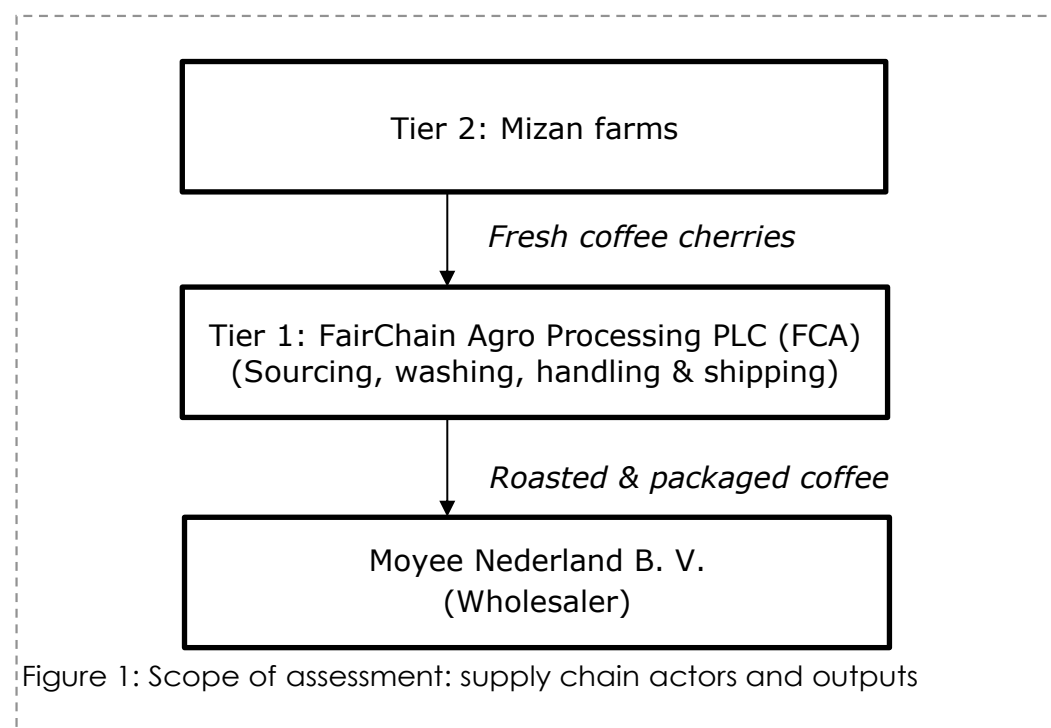
Oiconomy Pricing - Real price of roasted coffee beans from Ethiopia

Company Moyee Nederland B.V.
Location Amsterdam, the Netherlands
Product 1 kilogram of roasted coffee beans
Currency Euro
Oiconomy Assessment Oiconomy Sustainability Assessment Tool v2.04
Timeframe Data from 2022

Case description Moyee is a specialty coffee manufacturer from the Netherlands. The company sells roasted coffee sourced from Mizan, Ethiopia, where the fresh coffee cherries are cultivated by local farmers and processed by local professionals. Moyee has been engaging various projects to improve the sustainability of the coffee supply chain but has not yet quantified the full externalities associated with the coffee beans.



Scope of assessment



The supply-chain of one kilogram of roasted coffee beans was traced back by including 80% of the purchased value. This identified the most relevant supply chains: the **coffee beans** (Figure 1) Applying this 80% rule, other materials such as packaging was excluded from this assessment.

The **coffee beans** are cultivated by coffee farmers in Mizan, Ethiopia and fresh coffee cherries are processed by Fairchain Agro Processing PLC (FCA) in Addis Ababa, Ethiopia. The roasted and packaged coffee beans are transported by air to Moyee Nederland B.V. in the Netherlands.

Total results

Hidden costs show what impact the product has on planet, people and prosperity, that are currently not reflected in the prices charged for the goods along the value chain. The impact can be negative or positive. The negative costs are based on costs of prevention, meaning the costs necessary to eliminate the negative impact. The total hidden costs of one kilogram of roasted coffee beans are **€ 6,09** (Figure 2). The sales price of the product is € 13,70, meaning the hidden costs are adding **44%** onto the sales price. Figure 3 displays the negative hidden costs per supply-chain partner.

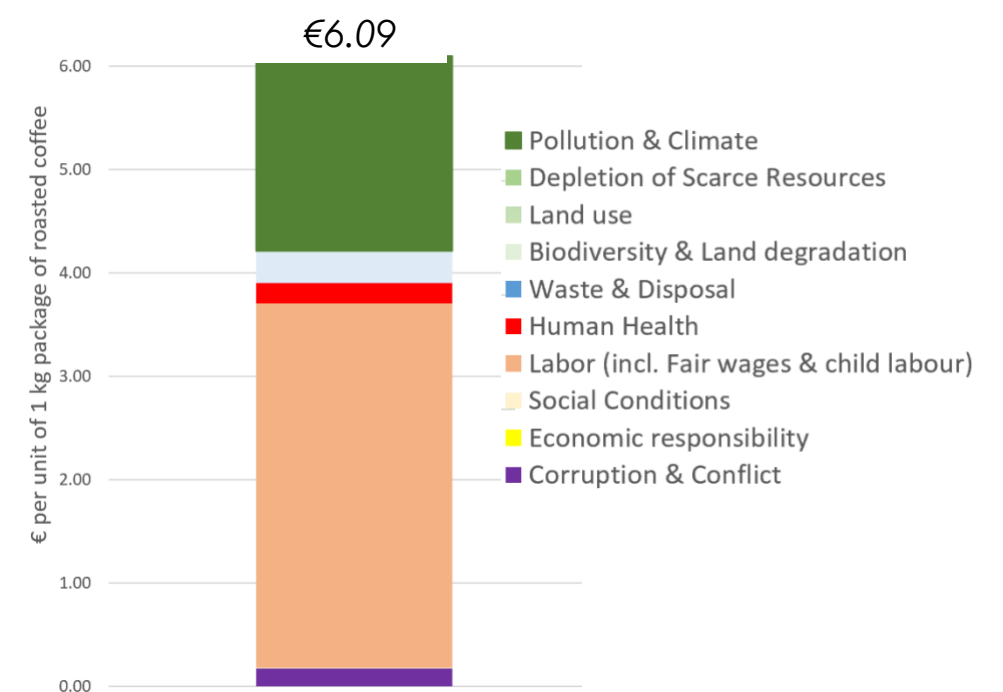


Figure 2: Negative hidden costs of 1 kg of roasted coffee beans

The main negative hidden costs come from the category **Labour**. Labour measures fair wages, fair inequality, and other labour conditions. The biggest factor is the practice of child labour on the farm. This leads to the total costs of € 2,82 in Labour. This was calculated as the costs to replace child workers with adult workers, earning a fair minimum wage. Moyee recognizes this issue and is addressing it through local projects, and the result endorses the importance of approaching this problem. Additionally, throughout the supply chain, the lack of adequate support for health insurance plans and personnel development, and the absence of adequate governance measures in labour conditions contribute to negative ESCU's.

The second and third biggest cost categories are **Pollution & Climate**. Most costs to mitigate pollution are caused by the FCA transporting the roasted beans by air (from Addis Ababa to Brussels), which leads to the cost of € 1,23. At Moyee, the use of non-renewable electricity and CO₂ emissions in transportation also contribute to negative ESCU's.

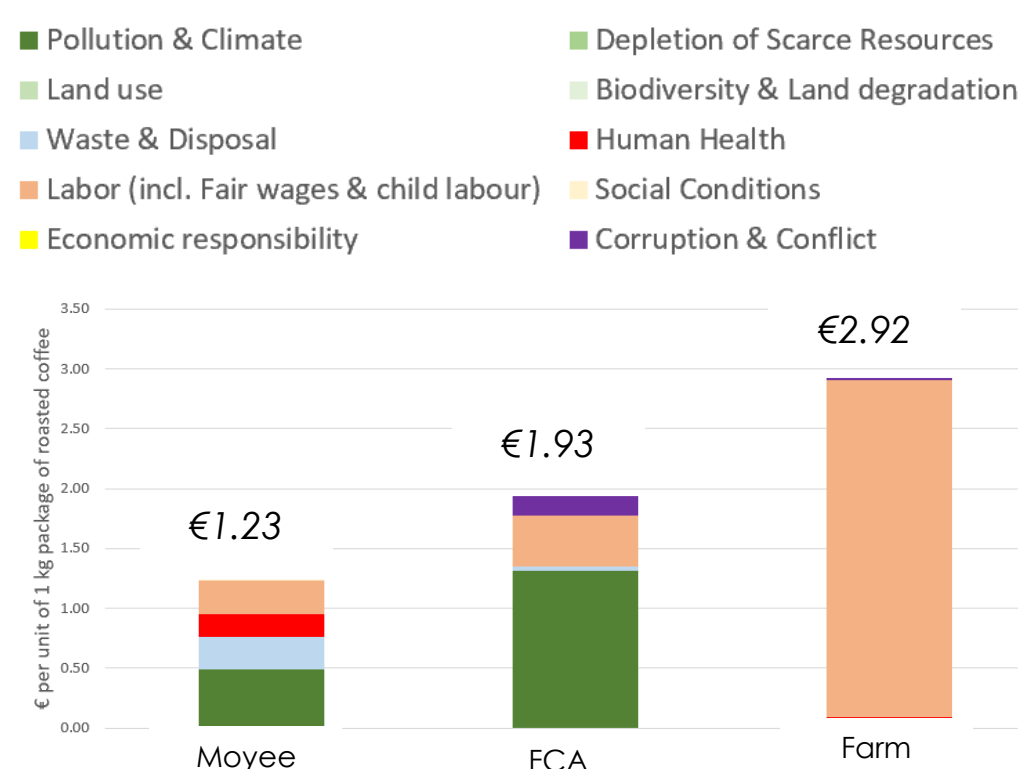


Figure 3: Negative hidden cost per supply-chain partner

Other negative hidden costs were found for **Waste & Disposal, Corruption & Conflict, and Human Health**. For **Waste & Disposal**, the default costs are € 0.31 related to the lack of company-specific information of Moyee and value-chain partners. Regarding **Corruption & Conflict** in the FCA tier, the lack of adequate governance measures towards corruption and conflict in a country at high risk of them leads to the costs of € 0.16. Lastly, the cost in **Human Health** at Moyee (€ 0.19) are caused by the absence of holistic measures towards human health and safety risks at the workplace.

Moyee is investing in research and implementation of **Living Income Reference Price (LIRP)** in coffee sourcing areas. The concept is comparable to fair minimum wage used in Oiconomy in that they both indicate the price needed for household to make a decent living. Due to this effort, in the entire supply chain, there are no negative ESCU's in wages and inequality of the payment. Although the living income changes constantly, it is encouraged to continue its efforts to research and pay fair remuneration.

Additionally, there is no impact on the category **Biodiversity** in the farm tier, which indicates the absence of biodiversity loss caused by farming activities. In fact, in this assessment it shows the farming is net positive due to no land degradation and CO2 capturing through the agroforestry practicing.



Figure 4: Photo of a coffee farmer

Positive costs

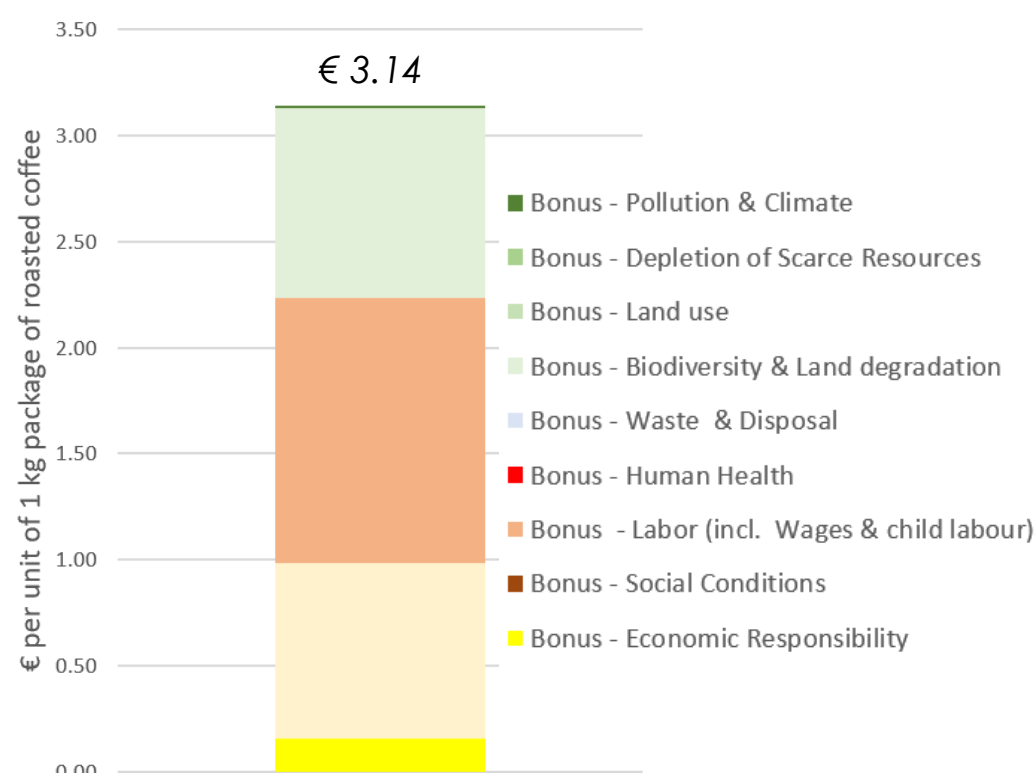


Figure 5: Positive costs of 1 kg of roasted coffee beans

Besides negative hidden costs, **positive costs** were calculated (Figure 5). Positive costs are based on actual company spending, benefitting others than the ones involved in the transaction. Positive costs of € 3,14 were found.

Moyee invests heavily in sustainability projects, such as promotion of agroforestry and project addressing child labour issues. Even as a small company Moyee invests huge amounts of money in a variety of activities that contributes sustainability. However, in order to continue to account for these activities as Bonus in the next version of Oiconomy, it would be desirable to have more objective information on the budget and implementation of activities for each project.

Data specificity

Hidden costs are calculated as the sum of the quantity of an issue (performance data), and the costs to prevent the issue (prevention costs). Both performance data and prevention costs can be company-specific or genericdatabase-sourced.

Performance data are measuring the sustainability performance of companies (e.g., kWh used). Moyee and its supplier were able to complete the assessment using a greater proportion of the company-specific data, including CO₂ emissions, transportation, wages, governance, etc. They were also able to prove that there was no negative impact in terms of scarce resources, land use, biodiversity & land degradation. However, data on waste & disposal was lacking in this assessment, and Moyee aims to work on collecting the missing data for future assessment.

Prevention costs are data on the costs of sustainability mitigation measures (e.g. investing in solar panels). None of the value-chain partners were able to provide much company-specific prevention costs, as it takes time to make investment proposals to mitigate the impact. This should be a focus when the assessment is repeated. So, all prevention costs were calculated by used default values.

Company reflection

"Our experience with Oiconomy as a method for evaluating the hidden costs and risks in our supply chain has been incredibly valuable. Implementing Oiconomy has required commitment from our team and local stakeholders. This proactive stance has allowed us to gain deeper insights into potential risks and hidden risks, enabling us to prioritize and improve our supply chain progressively."

"We have shared the findings internally with our team, creating awareness and fostering a shared understanding of the impact of hidden costs. In the future, we envision leveraging these results to shape impactful projects and improve our operations. Our ultimate goal? Positive costs only! May Oiconomy continue to thrive, enabling more sustainable and responsible business practices." – Impact Manager

Utrecht University thanks Moyee for their transparency and cooperation. More information is available online on the explanation of the Oiconomy Pricing [method and its principles](#), the Oiconomy Pricing [tool](#), and [examples of companies applying the method](#). For contact, please reach out to oiconomy@uu.nl

Disclaimer: this assessment was based on company data, but not independently verified.

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