



# Sustainability Factsheet

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## The European Dairy Sector & the Sustainable Development Goals (SDGs)

The European dairy sector is continuously working on improving not only its economic performance, but also its long-term sustainability and key to these efforts will be the achievement of the United Nations' SDGs.



The United Nations' SDGs are part of an ambitious and universal agenda, that are meant to bring the world onto a sustainable and resilient path. There are overall 17 Goals with 169 targets, which seek to end poverty, improve the lives of all peoples and secure the planet for future generations. The SDGs are built upon the Millennium Development Goals, trying to complete what these did not and are balanced on the three dimensions of sustainable development: economic, social and environmental.

The European dairy sector will play a key role in fulfilling these goals, as it provides key nutritional, social and economic inputs. Moreover, as an emitter of Greenhouse gases, it accepts its responsibilities and has continuously worked on greater sustainability through various international, as well as national, initiatives.



The dairy sector could be key to **ending poverty in all its forms**, especially for rural communities, where agriculture is still very prominent. With nearly 700,000 dairy farms across Europe, 300,000 people directly employed in the dairy processing sector and many more involved in retail, this is an industry that represents a large employment market and symbolises the financial livelihoods of many.

Dairy is essential in the strive towards **ending hunger, achieving food security and improving the nutritional value of diets in a sustainable manner**. Dairy products make key nutritional contributions to European diets, fulfilling 9-16% of the daily nutritional recommendations and are essential providers of protein (13-27%) and calcium (36-67%). Moreover, dairy contains a whole range of essential nutrients, such as potassium, iodine, zinc and many important vitamins (A,B2,B6,B12,D). <sup>1</sup> The animal by-products incurred during processing can also be used as a fertilizer that assists in other agricultural activities, such as growing crop for human consumption. Finally, the income that the production of dairy provides further ensures the food security of producers and their families.



Dairy products can play a key role in **ensuring healthy lives and promoting the well-being** of people. As previously mentioned, dairy contains a wide range of essential micronutrients, that are important in all diets, but especially for children, pregnant women and the elderly. Without dairy, it would be difficult to obtain adequate quantities of essential nutrients, as this is hard to achieve solely from plant-based products. <sup>1</sup> To ensure a safe and healthy product, the well-being of the animal equally needs to be taken into consideration.

The European dairy sector therefore attaches a great deal of importance to this issue and strictly abides to the Five Freedoms of animal welfare, which were formulated by the Farm Animal Welfare Council. <sup>2</sup>





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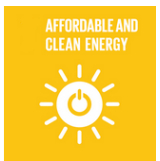
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Dairy can help **ensure an inclusive and equitable quality education and the promotion of lifelong learning**, since healthy diets are key to unlocking one's full learning potential. Dairy promotes student's educational performance by providing the necessary proteins and micronutrients that are required for full brain functionality. With programs, such as the EU's School Food Program, where the consumption of dairy is promoted, the sector helps boost the performance of students and therefore the overall quality of education. Moreover, the income that is made available to households throughout the production chain can give them the necessary means to provide their children with the best educations. <sup>3</sup>



With many recent developments in the dairy sector geared towards greater circularity and sustainability, they also assist in a more **sustainable management of water and sanitation**. Improvements in water use efficiency and recycling measures have clearly decreased the aquatic impact of dairy. Moreover, the grazing of dairy cows can have a positive effect on water quality by protecting the soil surface from erosion. <sup>4</sup> While there is still some way to go, recent developments have shown that the sector is on the right path.

Animal by-products, such as manure, that are obtained during the production stages, along with the energy they contain, are often neglected or even lost. However, these have proven to be an alternative source of energy, where methane can generate heat, power and even be used as vehicular fuel. In large-scale dairy operations, anaerobic digestions systems have even been known to produce enough energy to cover internal requirements and even feed back into the public energy grid. <sup>5</sup> These technologies allow the dairy sector to provide truly **sustainable energy**.



The European dairy sector provides **employment under decent working conditions** for many people and continuously contributes to Europe's **economic success**. The sector contributes around €10 billion annually to the positive EU trade balance and is therefore a key European industry. Moreover, with the global population expected to grow and the global standard of living with it, the demand for high protein nutritional products, such as dairy, are said to increase by 60%.<sup>6</sup> Meaning that this will be a sector that will continue to experience economic growth in the years to come.

The European dairy sector has established a **resilient infrastructure, that has come to promote sustainable methods of production and fosters an environment of innovation**. Apart from the fact that the sector provides ample jobs throughout the production chain, in dairy and feed production, processing and retailing, a lot of effort is equally being invested in new innovations that improve its overall sustainability. From new breeding methods, to feed modifications and production technologies, the dairy sector is a hub for innovation.



Dairy products will prove essential when trying to **achieve a practical healthy and sustainable diet** for everyone. They are affordable, as well as having a relatively low environmental impact when considering their high nutrient density <sup>7</sup> and must therefore not be left out of any future guidelines on sustainable diets. With almost one-third of all food produced globally being lost or wasted between the field and the fork, the European dairy sector plays a vital role in **ensuring sustainable production patterns**. By actively participating in multiple international initiatives, such as "Every Crumb Counts", the sector is continuously reducing its waste profile. Furthermore, with more than 13% of wastage taking place at the end of the chain, by consumers and retailers, the sector has also taken upon itself to inform the public on unnecessary food waste. <sup>8</sup>





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The global dairy sector is a significant contributor to the global greenhouse gas emissions, with the entire sector contributing an average of 2.7%. Whereas the global average of carbon dioxide per kg of liquid milk is 2.4kg, it is significantly lower in Europe, where it is 1.5kg.<sup>7</sup> The European dairy sector has been particularly active in recent years in this area and has **lowered its climate impact** through feed modifications, better manure management and especially through the reductions of dairy cow herds, which has been made possible through increased yields per cow. Whereas the total average milk yield per cow in 2000 amounted to 5,484 kg, it increased to 6,906 kg in 2016.<sup>9</sup> This has not only allowed a thinning of the herd and a subsequent reduced climate impact but has also contributed greatly to food security. Moreover, dairy producers can help reduce the greenhouse gas impact through efficient farm management which promotes soil carbon sequestration. This has the potential of sequestering more than 10% of the anthropogenic emissions.<sup>10</sup>



With dairy productions usually being a land intensive business, the sector plays a key role in the **halting and reversing of land degradation**. Through efficient grazing of cow herds these processes can contribute to the restoration of grasslands and carbon sequestration in soils.<sup>10</sup> Moreover, ruminant animals, such as cows, have the ability of turning economically unusable peripheral landscapes into high quality protein for human consumption.

The global dairy sector has **solidified the means of implementation and strengthened the necessary partnerships** for achieving a sustainable dairy industry. Under the **Global Dairy Agenda for Action (GDAA)** the entire sector has come together to create the **Dairy Sustainability Framework (DSF)**, which acts as a roadmap towards achieving greater sustainability and aligning such initiatives around the world. The 11 criteria of the DSF are closely aligned to the SDGs, in that several DSF objectives actively participate to one or more of the goals. Moreover, as a vital partner to the **European Union (EU)**, the European dairy industry, by comprehensively implementing and supporting relevant policies, stands alongside the Union in its effort of promoting the SDGs, both internally and externally.<sup>11</sup> In October 2016, the global dairy community came together in **Rotterdam to sign a joint declaration on sustainable development** within the sector. The declaration acts not only as a plan of action of how dairy can come to contribute all peoples and the planet, but furthermore serves as symbol that the global dairy industry is committed to **jointly implementing the UNs SDGs**.



- ### 17 Partnership for the goals
- The dairy sector stakeholders have come together under the Global Dairy Agenda for Action (GDAA) and created the Dairy Sustainability Framework, a roadmap towards greater sustainability in the sector
  - Close cooperation with the EU in its sustainability efforts

- ### 15 Life on Land
- Efficient grazing management can contribute to grassland restoration, carbon sequestration in soils and can reduce deforestation through agroforestry
  - Ruminant grazing can turn unusable peripheral land into high quality protein for human consumption

- ### 13 Climate Action
- The dairy sector is a significant contributor to global Greenhouse gases emissions (2.7%)
  - Roughly 2.4kg carbon dioxide-eq./kg liquid milk, however only 1.5kg for European milk
  - European dairy producers have been at the forefront of developing and implementing more environmentally friendly practices.

- ### 12 Responsible consumption & production
- Wastes and losses along the dairy production chain are still relatively high (of 1l milk, 100ml – 250ml is wasted, depending on the region)
  - The European dairy sector is has been a major stakeholder in food waste reduction initiatives

- ### 10 Reduced inequalities
- Dairy production is a source of income, creates employment opportunities and provides market participation

- ### 1 No poverty
- Many rural areas rely on dairy production and processing for their income

- ### 2 Zero Hunger
- Dairy products are high in energy, provide high value protein and other essential nutrients
  - Animal by-products can be used as fertilizers for crop production
  - Production provides incomes that can ensure food security

- ### 3 Good Health & well-being
- Dairy products provide essential nutrients, especially for adolescents, pregnant women and the elderly
  - European dairy sector also ensures the good health and well-being of its animals

- ### 4 Quality Education
- A healthy diet, of which dairy is key, is vital for a persons learning capacities
  - Dairy production provides incomes that can support education

- ### 6 Clean water & sanitation
- Dairy livestock can contribute to the protection of water quality through grazing

- ### 7 Affordable & clean energy
- Dairy production can provide an alternative to fossil fuels, such as the recycling of manure

- ### 8 Decent work & economic growth
- The dairy sector contributes €10 Billion annually to the EU trade balance
  - With demand set to increase by 60% it is a growing sector

- ### 9 Industry, Innovation & Infrastructure
- The entire dairy value chain, from production, processing and retail, provide valuable inputs
  - There is an increasing amount of innovation in the sector





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