Sustainability standards and the SDGs: water and energy efficiency

A snapshot of ISEAL members' contribution

Research shows that **sustainability standards** can reduce the water and energy footprint of certified production in many sectors, **directly contributing** towards achieving **Sustainable Development Goals** (SDGs) 6 and 7.

SDG 6:
Ensure availability and sustainable management of water and sanitation for all.

SDG 7:
Ensure access to affordable, reliable, sustainable and modern energy for all.

Energy efficiency

The **adoption** of sustainability standards can significantly **reduce** the energy footprint of farming and fishing.

LEAF, global

Improvements by **LEAF Marque** certified businesses[1]

From 2013 to 2016

67%
Increase in certified businesses measuring their carbon footprint

127,711 ha
Area of certified crop with energy consumption monitored

Bonsucro, global

Certified mills with GHG emissions **below** industry average[2]

91%

RSB, global

CO_2 avoided through the responsible **production** of biofuel[3]

CO_2 equivalent

439,500 mt

ASC, Vietnam

Certified pangasius farms have **lower emissions** and use **fewer resources** than non-certified farms[4]

▼ lower
nitrogenous discharges

▼ lower
fish-derived ingredients

How?

Many **sustainability standards** require certified entities to **monitor** carbon use and reduce greenhouse gas emissions by **implementing** energy-saving plans. In addition, standards **limit** land conversions and **work** with partners to **improve** uptake of **energy-saving** technologies such as biofuels and renewables.

Water conservation and management

The adoption of **sustainability standards** can **reduce** the water footprint of agriculture, **improve** water management and **preserve** the quality of natural water bodies.

BCI, China and Pakistan

Certified cotton farms use less water for **crop irrigation** than **non-certified** farms[5]

China
16%
▼ less

Pakistan
37.5%
▼ less

RA/SAN, Cote d'Ivoire

Cocoa farmers using **conservation** measures to **increase** water filtration and **prevent** soil erosion[6]

Certified
42%

Non-certified
4%

UTZ, Colombia

Certified coffee farmers use[7]

11% **less water**

during the **wet milling process** than **non-certified** farmers

How?

Many **sustainability standards** require **certified entities** to measure usage and **actively** conserve water. Standards also **require** the preservation of natural water bodies through the **creation** of buffer zones, **proper** wastewater treatment and **reduction** of water pollution.

Partnering to address key challenges

Research indicates some **challenges** remain:

- **Scaling up of** water **management practices** to watershed level
- **Improved** water efficiency and pollution **reduction**
- More **resilient** production systems to **cope** with **changing** climate patterns and resource **availability**
- **Stricter** controls on land-use **change** and **conversion** for commodity production
- **Better** measurement of carbon footprints and GHG emissions, **especially** in smallholder agriculture

Standards are **working together** to address these issues. For instance, eight ISEAL members have **established** an Integrated Pest Management Coalition to **promote** common principles for integrated pest management and **alternatives** to pesticide use, **share** strategies and techniques, and **create** a training manual on worker health risks and using safety equipment.

ISEAL represents the global movement of sustainability standards.

To find out more about our members visit **www.ISEALalliance.org**
For more evidence on the impacts of standards visit **www.standardsimpacts.org**

Data sources: Evidence in this summary is based on publicly available data and research produced by ISEAL members and others with specific references available in the endnotes. All evidence is specific to the standard, product and country/region stated with limited generalisability. The nature of evidence varies according to research design and methodology used and not all evidence presented here has a counterfactual. Where a comparison is made, the 'certified' refers to the standard in the sub-title.

List of acronyms used: LEAF: Linking Environment And Farming; RSB: Roundtable on Sustainable Biomaterials; ASC: Aquaculture Stewardship Council; BCI: Better Cotton Initiative; RA: Rainforest Alliance; SAN: Sustainable Agriculture Network

1. Source: LEAF. (2016). Delivering More Sustainable Food and Farming: LEAF's Global Impacts Report 2016. LEAF, UK. Figures from 2015. **2**. Source: Bonsucro. Outcome Report 2015. Bonsucro, London, UK. The data refers only to ethanol production, not sugar, and only for the year 2012. **3**. Source: Roundtable on Sustainable Biomaterials. (2015). Outcome and Evaluation Report 2015. **4**. Source: Nhu, Trang T., et al. (2016). Environmental impact of non-certified versus certified (ASC) intensive Pangasius aquaculture in Vietnam, a comparison based on a statistically supported LCA. Environmental Pollution (2016) 219: 156-165. LCA = life cycle assessment. From. https://www.researchgate.net/profile/Thomas_Schaubroeck/publication/309546139_Environmental_impact_of_non-certified_versus_certified_ASC_intensive_Pangasius_aquaculture_in_Vietnam_a_comparison_based_on_a_statistically_supported_LCA/links/5817082208ae90acb2410d8c.pdf **5**. Source: Better Cotton Initiative. (2015). 2014 Harvest Report. Geneva. From http://bettercotton.org/wp-content/uploads/2013/12/FINAL-HARVEST-REPORT-2014-updated-2pg1.pdf. **6**. Source: Milder, J. C., & Newsom, D. (2015). 2015 Impacts Report: Evaluating the Effects of the SAN/Rainforest Alliance Certification System on Farms, People, and the Environment. Rainforest Alliance, New York and Mexico. From http://www.rainforest-alliance.org/sites/default/files/publication/pdf/SAN_RA_Impacts_Report.pdf. **7**. Source: García, C.; García, J.; Ochoa, G.; Mora, J. C. and Castellanos, J. F. (2014) Impact Evaluation of UTZ Certified Coffee Program in Colombia. (2008-2012). CRECE, Manizales.

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