ENVIRONMENTAL PRODUCT DECLARATION

EPD®

SUSTAINABLE LEATHER®
DANI

In accordance with ISO 14025 for

LEATHER FOR FURNITURE, FOOTWEAR AND LEATHER GOODS

from **DANI S.P.A.**

PROGRAMME:
The International EPD® System
www.environdec.com

EPD REGISTRATION NUMBER:
S-P-04540

VALID UNTIL:
2026-09-20

PROGRAMME OPERATOR:
EPD International AB

PUBLICATION DATE:
2021-09-21

REVIEW DATE:
2022-10-13

An EPD should provide current information, and may be updated if conditions change.
The stated validity is therefore subject to the continued registration and publication at www.environdec.com

Programme

The International EPD® System

EPD International AB
Box 210 60
SE-100 31 Stockholm
Sweden

www.environdec.com
info@environdec.com

EPDs within the same product category but from different programmes may not be comparable.

Product category rules (PCR): Finished bovine leather, 2011:13, version 3.0.3, UN CPC 2912

PCR review was conducted by: The Technical Committeee of the International EPD® System; Chair of the PCR review: Maurizio Fieschi, info@environdec.com

Independent third-party verification of the declaration and data, according to ISO 14025:2006:
☒ EPD process certification
☐ EPD verification

Third party verifier: SGS Itala Spa, via Caldera 21 – 20153 Milano

In case of accredited certification bodies:
Accredited by: Accredia n.006H

Procedure for follow-up of data during EPD validity involves third party verifier:
☒ Yes
☐ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable.

Owner of the EPD

Filippo Longo

filippo_longo@gruppodani.it

Dani S.p.A.
Via della Concia, 186 Arzignano
Tel. +39 0444 471211

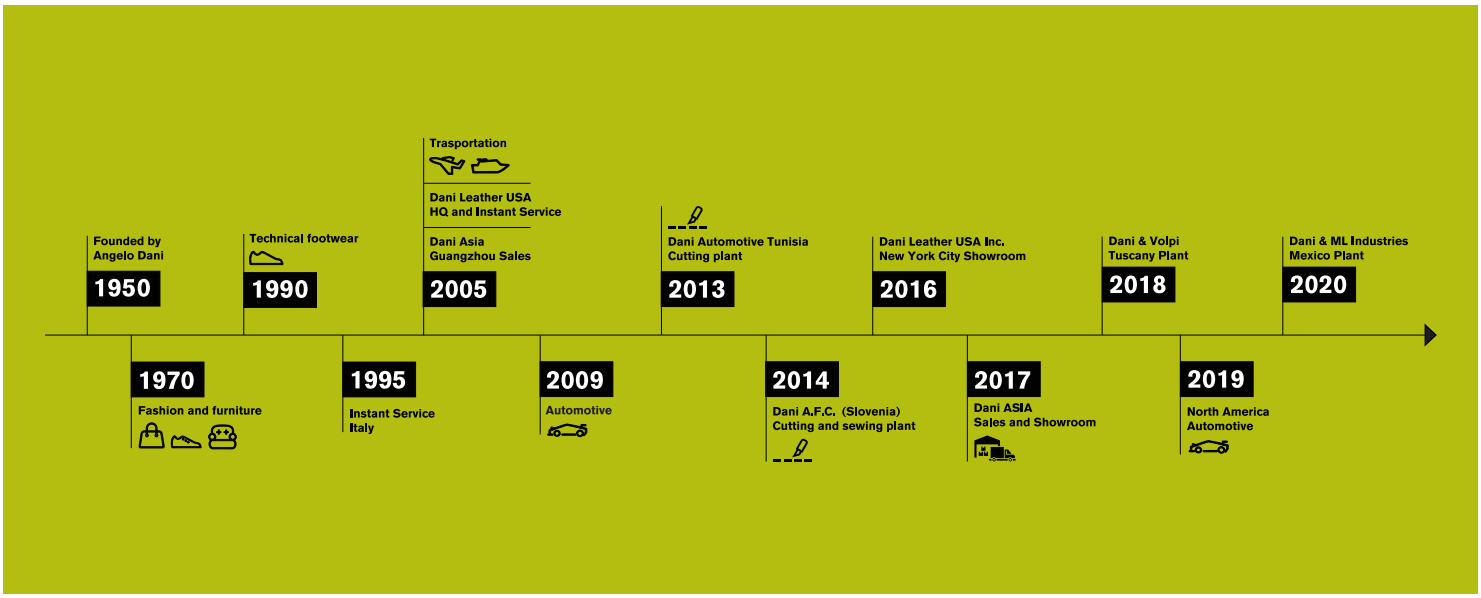
Description of the organisation

From its origins in 1950 as a small family-run tannery, Dani is now an international company with global positioning. We can rely on:

- 1,200 Employees
- 170M Euros in international revenues
- 3 Full cycle tanneries and headquarters in Italy
- 3 Operations plants for cutting & sewing
- 2 Sales facilities in the USA and China
- 2 Instant Service stocks in Italy and the USA

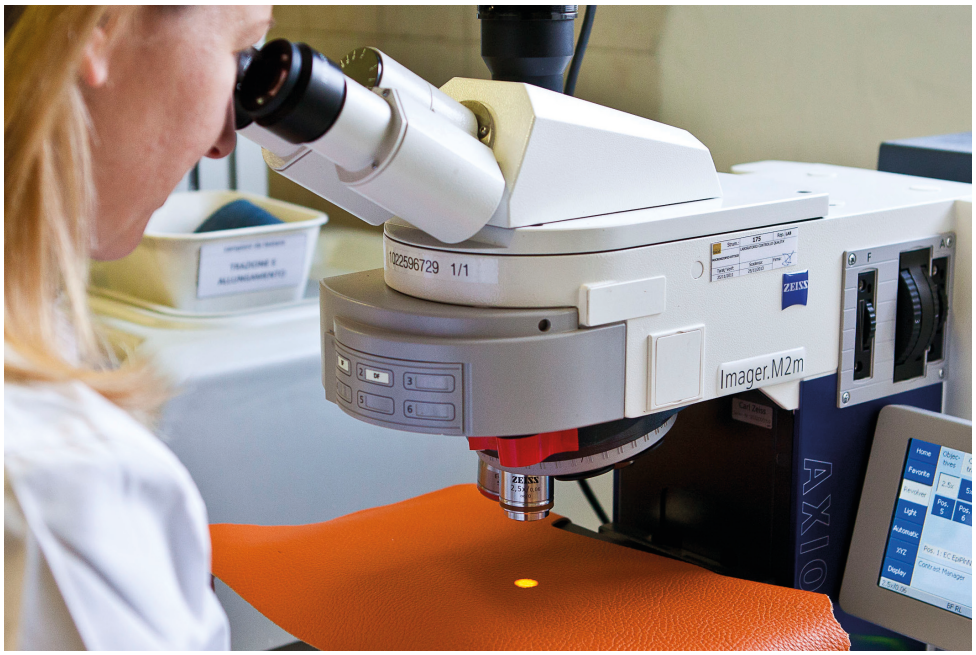
Our leather is used to put into practice bold ideas of stylists and designers, enhancing interiors of highclass cars, adding comfort and visual appeal to the most exclusive interiors. Leather is the result of industrial organisation, artisan skill, passion and creativity. Every day we act following our sustainable business model in which social and territorial inclusion, preservation of natural resources and profitability of investments coexist and sustain one another.

A commitment that is clearly stated in our logo: "Sustainable leather".
We constantly keep in touch with our customers and suppliers, workers and their families, public institutions and local communities, research authorities and universities. Our desire is to understand how the world in which we live evolves and preserve it.
We open our doors to listen to people, understand needs and put forward innovative suggestions together, promoting the virtuous circle that has made Dani into one of the leading companies in the world.
This EPD study concerns the three factories of the furnishings, footwear and leather products division, located in Arzignano at: Via Quarta Strada and via della Concia, 176 - via Quinta strada, 20. Dani leather is the result of a long production cycle carried out entirely in Arzignano.



Certifications

We invest in certifications as a communication tool of our daily commitment to improve the safety at workplace, the quality of our products, the reliability of our processes and the environmental impact of our processes. They show the implementation of advanced organisational models and the desire to improve their effectiveness and efficiency.



DANI S.p.A. has obtained the following certificates:

QUALITY SYSTEM
ISO 9001

QUALITY SYSTEM
IATF 16949

SAFETY SYSTEM
ISO 45001

ENVIRONMENTAL SYSTEM
ISO 14001

INFORMATION SECURITY SYSTEM
ISO/IEC 27001

ENVIRONMENTAL PRODUCT DECLARATION
Following the LCA (Life cycle assessment) study, the following impact categories are examined: greenhouse effect, ozone depletion, acidification, photochemical smog and eutrophication.
www.environdec.com
Certificate authority: SGS

DER BLAUE ENGEL (RAL UZ 148)
This sets a series of parameters which are lower than those provided for by law, with regard to emissions of substances contained in leather for furnishings. Certificate authority: RAL
Der Blaue Engel product certification does not apply to the product covered by the EPD, but to other products excluded from the study.

LEATHER FROM ITALY FULL CYCLE (UNI EN 16484:2015)
This certifies that all production processes take place in Italy.
Certificate authority: ICEC

LEATHER WORKING GROUP (LWG)
is a multi stakeholder group aimed to develop and maintain a protocol that assesses the compliance and environmental performance of tanneries and promotes appropriate environmental commercial practices within the leather sector.

Name and location of production site

The item Fit Zero was produced in the DANI SpA plants located in Arzignano (VI).

PRODUCT INFORMATION

Product name

Fit Zero

Product identification

The product is identified as “Other leather, of bovine or equine animals, furless-CPC 2912”, according to CPC (Central Product Classification).

Product description

The product covered by this declaration is “finished cowhide”, intended as a finished product by the tanning industry, ready to be used as a semi-processed input for the next transformation phases by the various manufacturing industries. The hide can be used as a semiprocessed product for various finished products, such as furniture, clothing, footwear, etc. As the use of “finished cowhide” varies considerably in the final consumer products, no specific product function is defined.

This declaration is based on the production of the analysed article (Black Licorice Fit Zero) in the tannery in the reference period (2020) and the result therefore refers to a specific category of manufactured leather. A raw hide could be considered a waste product from the slaughterhouse, and the tanning processes could be considered as a waste recovery process. In compliance with the conservative approach that is requested by the PCR relative to this declaration, the raw hide is considered as a co-product of cattle breeding, and therefore has an environmental impact relative to that phase as well.

UN CPC code

“Other leather, of bovine or equine animals, furless- CPC 2912.

Geographical scope

Global

LCA INFORMATION

Declared unit

The declared unit is the production of 1 m^2 of "finished bovine leather", measured according to ISO standard 11646, produced from fresh raw bull hide wet-white tanned

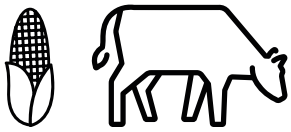
Time representativeness

2020

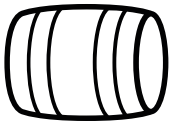
Database(s) and LCA software used

Agrifootprint 4.1, Ecoinvent 3.6, SimaPro

UPSTREAM | CORE | DOWNSTREAM



Farming, breeding and slaughtering



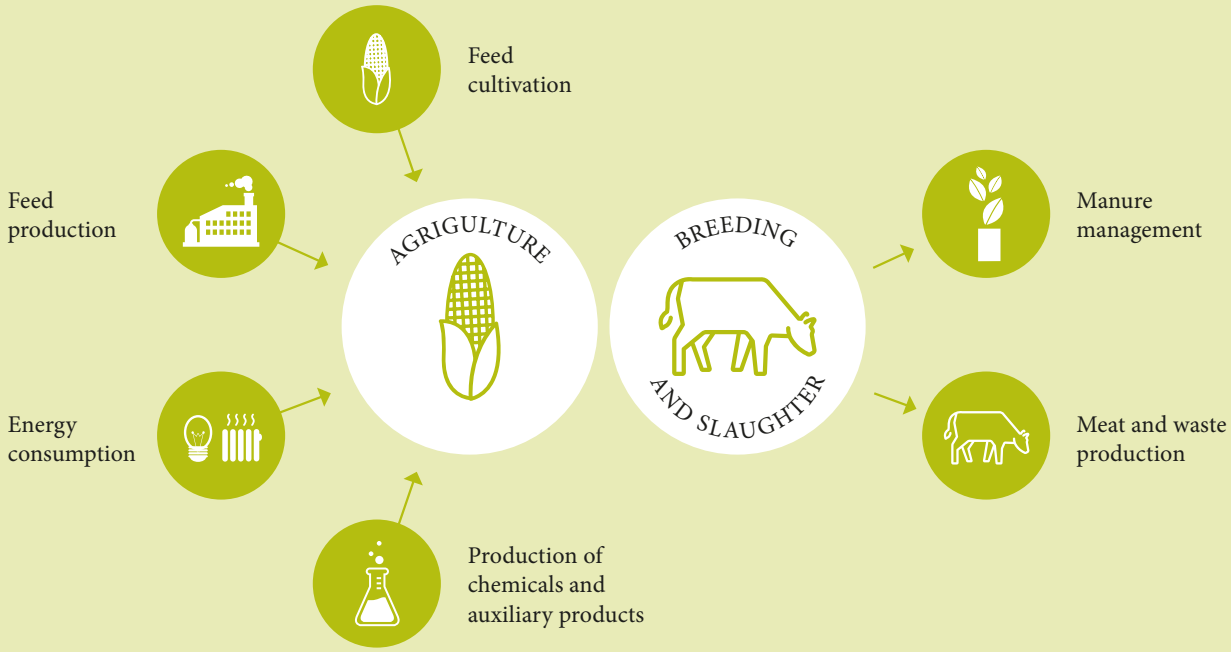
Production

Packaging end-of-life processes

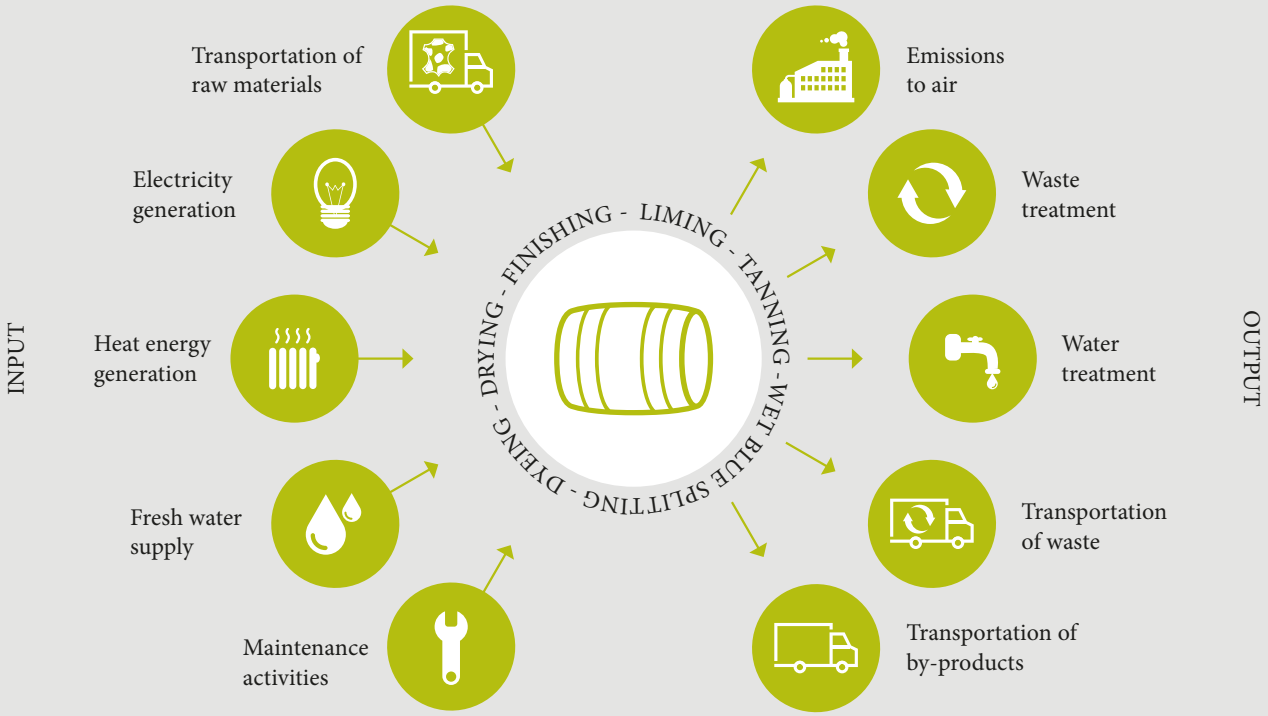
System diagram

List of the processes making up the UPSTREAM module:	List of the processes making up the CORE module:	List of the processes making up the DOWNSTREAM module:
• Raw materials extraction for farming and cattle breeding • Farming • Cattle breeding • Transportation of animals to the slaughterhouse • Slaughterhouse • Production of chemicals and accessories used to manufacture leather • Production of primary and secondary packaging materials	• Transportation of raw materials to the production factory • Electricity and heat energy consumption in the production stage • Fresh water consumption in the production stage • Maintenance activities • Processes required for manufacturing the finished bovine leather • Emissions to air and water • Production waste • Transportation of waste and by-products	• End-of-life of the packaging used to ship the finished leather

Upstream



Core



Downstream

Description of system boundaries

Cradle-to-grave

Excluded lifecycle stages

- Transportation of the finished leather to the customer
- Use phase
- End-of-life of the finished product

Contribution of generic data

With regard to the contribution of generic quality data to overall impacts, the following approach was used: generic data (not selected) is considered as data used for the packaging disposal scenario, chemicals with generic quality data used to manufacture Black Licorice Fit Zero. The contribution of generic data (not selected) is in any case below the 10% threshold permitted by the PCR, for all impact categories.

More information

Name and contact information of LCA practitioner: Aequilibria Srl, info@aequilibria.com

CONTENT DECLARATION

Product

Chemicals in finished bovine leather subjects to legal limits

SUBSTANCE	UNITS OF MEASUREMENT (parts per million)	TOTAL	LEGAL LIMITS
CHROME	ppm	▼ 3*	▼ 3_A
FORMALDEHYDE	ppm	▼ 10	▼ 75_B
PENTACHLOROPHENOL	ppm	▼ 0.05	▼ 1_C
AZO DYES	ppm	▼ 30*	▼ 30_D

*limit of detection

A Reg. 1907/06/EC (REACH) (Amended by Reg. 301/2014/EC)
B Japanese Law 112 for the control of household products containing harmful substances
C Reg 1907/06/EC (REACH)
D Reg 1907/06/EC (REACH)

Potential environmental impact

PARAMETER		UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Global warming potential (GWP)	Fossil	kg CO_2 eq.	26.71	6.10	0.02	**32.84**
	Biogenic	kg CO_2 eq.	15.86	0.01	0.00	**15.87**
	Land use and land transformation	kg CO_2 eq.	6.36	3.97E-03	1.59E-06	**6.37**
	TOTAL	kg CO_2 eq.	48.93	6.12	0.02	**55.07**
Acidification potential (AP)		kg SO_2 eq.	0.78	0.02	8.46E-05	**0.81**
Eutrophication potential (EP)		kg PO_4^{3-} eq.	0.39	7.17E-03	2.05E-05	**0.40**
Formation potential of tropospheric ozone (POCP)		kg NMVOC eq.	1.29E-01	2.08E-02	1.41E-04	**0.15**
Abiotic depletion potential – Elements		kg Sb eq.	2.18E-04	8.35E-05	9.41E-08	**3.02E-04**
Abiotic depletion potential – Fossil resources		MJ, net calorific value	234.07	83.89	0.19	**318.16**
Water scarcity potential		m^3 eq.	12.92	7.40	0.00	**20.32**

Use of resources

PARAMETER		UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Primary energy resources – Renewable	Use as energy carrier	MJ, net calorific value	34.24	5.78	0.00	**40.02**
	Used as raw materials	MJ, net calorific value	0.00	0.00	0.00	**0.00**
	TOTAL	MJ, net calorific value	34.24	5.78	0.00	**40.02**
Primary energy resources – Nonrenewable	Use as energy carrier	MJ, net calorific value	271.64	99.33	0.21	**371.17**
	Used as raw materials	MJ, net calorific value	0.00	0.00	0.00	**0.00**
	TOTAL	MJ, net calorific value	271.64	99.33	0.21	**371.17**
Secondary material		kg	0.00	0.00	0.00	**0.00**
Renewable secondary fuels		MJ, net calorific value	0.00	0.00	0.00	**0.00**
Non-renewable secondary fuels		MJ, net calorific value	0.00	0.00	0.00	**0.00**
Net use of fresh water		m^3	0.45	0.29	0.00	**0.73**

Waste production

PARAMETER	UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Hazardous waste disposed	kg	4,61E-04	1,96E-04	5,21E-07	**6,57E-04**
Non-hazardous waste disposed	kg	7,61E-01	2,02E+00	4,24E-02	**2,82E+00**
Radioactive waste disposed	kg	1,92E-04	2,67E-04	1,35E-06	**4,61E-04**

Output flows

PARAMETER	UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Components for reuse	kg	INA	0.00	0.00	**0.00**
Material for recycling	kg	INA	0.98	0.14	**1.13**
Materials for energy recovery	kg	INA	0.00	0.02	**0.02**
Exported energy, electricity	MJ	INA	0.00	INA	**0.00**
Exported energy, thermal	MJ	INA	0.00	INA	**0.00**

The result tables shall only contain values or the letters "INA" (Indicator Not Assessed).
It is not possible to specify INA for mandatory indicators. INA shall only be used for voluntary parameters that are not quantified because no data is available.

Other environmental indicators

PARAMETER	UNIT	UPSTREAM	CORE	DOWNSTREAM	TOTAL
Chromium	kg	0.00	INA	INA	**0.00**
Formaldehyde	kg	0.00	INA	INA	**0.00**

ADDITIONAL INFORMATION

✓ The average thickness is 1.10 - 1.50 mm, according to the measured finished product produced in the reference period.
✓ The finished bovine leather is of the following type: "full grain leather";
✓ The finished bovine leather analysed belongs to the following category: "semi-aniline leather".

DIFFERENCES FROM PREVIOUS EPD VERSIONS

Some typing mistakes have been corrected included waste production impact values.

Please note that EPDs developed for the same category of product but following different programs may not be comparable.

REFERENCES

General Programme Instructions of the International EPD® System. Version 4.0.
PCR 2011:13. Finished Bovine Leather. Version 3.0.3
Rapporto di LCA della pelle bovina finita per l'articolo "PAS 14 Rapporto di LCA_Fit Zero" (rev 0 del 01/07/2021) – Dani Spa
ISO 11646:2014, Leather - measurement of area
Agri-footprint version 4.1
Ecoinvent version 3.6