

GreenDelta

sustainability consulting + software

Webinar

What's new in PSILCA 2.0

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Agenda

Agenda

1. About PSILCA
2. What's new in PSILCA 2.0?
3. PSILCA variants
4. More information



About PSILCA

PSILCA

Product Social Inventory Life Cycle Assessment

- Database for S-LCA
- Calculate and assess social impacts of products along life cycles
- Detect social hotspots



Eora as backbone

Eora MRIO database as backbone (Lenzen et al.):

- 189 individual countries represented by a total of 14,838 sectors (classified by entity: industries and commodities)
- high-resolution heterogeneous classification, or 26-sector harmonized classification
- Monetary process connections

Structure of processes

26 harmonized sectors (industries)
for Afghanistan

- Processes
 - PSILCA
 - Afghanistan
 - Industries
 - Agriculture - AF
 - Construction - AF
 - Education, Health and Other Services - AF
 - Electricity, gas, and water supply - AF
 - Financial Intermediation and Business Activities - AF
 - Fishing - AF
 - Hotels and Restaurants - AF
 - Maintenance and Repair - AF
 - Manufacture of electrical machinery and equipment - AF
 - Manufacture of food products and beverages - AF
 - Metal Products - AF
 - Mining and Quarrying - AF
 - Other Manufactures - AF
 - Others - AF
 - Petroleum, Chemical and Non-Metallic Mineral Products - AF
 - Post and telecommunications - AF
 - Private Households - AF
 - Public Administration - AF
 - Recycling - AF
 - Re-export and Re-import - AF
 - Retail Trade - AF
 - Textiles and Wearing Apparel - AF
 - Transport - AF
 - Transport Equipment - AF
 - Wholesale Trade - AF
 - Wood and Paper - AF

1022 detailed sectors (industries
and commodities) for UK

- UK
 - Commodities
 - Industries
 - Abrasive product manufacturing - GB
 - Accounting, book-keeping and auditing activities; tax consultancy - GB
 - Activities of business, employers and professional organisations - GB
 - Activities of membership organisations n.e.c. - GB
 - Activities of other transport agencies - GB
 - Activities of trade unions - GB
 - Activities of travel agencies and tour operators; tourist assistance activities n.e.c. - GB
 - Adult and other education - GB
 - Advertising - GB
 - Agricultural services; landscape gardeners etc. - GB
 - Air passenger transport - GB
 - Aluminium ores and concentrates - GB
 - Aluminium production - GB
 - Ancillary activities related to printing - GB
 - Animal husbandry service activities, except veterinary activities - GB
 - Architectural and engineering activities and related technical consultancy - GB
 - Artistic and literary creation and interpretation - GB
 - Auxiliary financial services - GB
 - Bacon and ham production - GB
 - Banking - GB
 - Bars - GB
 - Bookbinding - GB
 - Botanical and zoological gardens and nature reserve activities - GB
 - Building and repairing of pleasure and sporting boats - GB
 - Building and repairing of ships - GB

Social indicators

- Social indicators and its structure mainly inspired by UNEP/SETAC guidance book, PRé Roundtable, own research:

STAKEHOLDER

(Workers, Local communities, Value chain actors, Society, Consumers)

SUBCATEGORY

(Fair salary, Discrimination, Indigenous rights...)

INDICATOR

(qualitative and quantitative ones)

Social indicators

Indicator structure in openLCA

- Social indicators
 - Local Community
 - Access to material resources
 - Local Employment
 - Migration
 - International Migrant Stock
 - International migrant workers in the sector
 - Net migration rate
 - Respect of indigenous rights
 - Safe and healthy living conditions
 - Society
 - Value Chain Actors
 - Workers
 - Child labour
 - Discrimination
 - Fair Salary
 - Living wage, per month
 - Minimum wage, per month
 - Sector average wage, per month
 - Forced Labour
 - Freedom of association and collective bargaining
 - Health and Safety (Workers)
 - Social benefits, legal issues
 - Working time

Social indicator: Women in the sectoral labour force

General information

Name	Women in the sectoral labour force
Description	Explanation of unit of measurement: Ratio between the share of women employed in a sector out of total active female population in a country and the share of men and women working in the same sector out of total active population in the country
Category	Workers > Discrimination
Version	00.00.001
UUID	231c7349-80d6-4eaa-83b5-e39d177ad3b1
Last change	

Additional information

Unit of measurement	ratio
Evaluation schema	1 = no risk; 0.8-<1 or >1-1.5 = very low risk; 0.6-<0.8 or >1.5 = low risk; 0.4-<0.6 = medium risk; 0.2-<0.4 = high risk; <0.2 = very high risk; not applicable; no data

Activity variable

Name	Working hours
Quantity	Duration
Unit	h

Screenshots from openLCA

Indicator assessment

- Assessed by an ordinal risk scale of different risk and opportunity levels
 - Modelled as elementary output flows per process
 - Quantified by worker hours
 - Reliability/ validity assessed by data quality indicators

Data quality

- Data quality assessed by a square, pedigree matrix (based on Weidema and Wesnæs (1996), but adapted to social LCA, Ciroth and Franze 2014)

		1	2	3	4	5
Reliability of source	Reliability of the source(s)	Green	White	White	White	White
Conformance of the data set	Completeness conformance	White	Light Green	White	White	White
	Temporal conformance	White	White	Yellow	White	White
	Geographical conformance	White	White	White	Orange	White
	Further technical conformance	White	White	White	White	Red

Representative selection of c

Indicator assessment

- Assessed by an ordinal risk scale of different risk and opportunity levels
 - Modelled as elementary output flows per process
 - Quantified by worker hours
 - Reliability/ validity assessed by data quality indicators
 - Both the **indicator values and the risk evaluation schemes** are provided
- Risk levels can be modified individually

Process outputs in PSILCA

▼ Outputs

Flow	Category	Amount	Unit	...	Uncer...	A.	Data quality entry
Presence of anti-competitive behaviour or violation of anti-trust and monopoly legislation; low risk	Value Chain Actors/Fair Competition	0.00478	h		none		(2;2;5;1;2)
Presence of business practices deceptive or unfair to consumers; very low risk	Consumers/Transparency	0.00478	h		none		(2;3;1;3;1)
Presence of indigenous population; no risk	Local Community/Respect of indigenous ...	0.00478	h		none		(5;5;5;5;5)
Presence of sufficient safety measures; high risk	Workers/Health and Safety (Workers)	0.00478	h		none		(1;2;1;4;2)
Public expenditure on education; high risk	Society/Contribution to economic develo...	0.00478	h		none		(1;1;4;1;0)
Public sector corruption; low risk	Value Chain Actors/Corruption	0.00478	h		none		(4;3;1;1;0)
Rate of fatal accidents at workplace; very low risk	Workers/Health and Safety (Workers)	0.00478	h		none		(2;3;4;1;3)
Rate of non-fatal accidents at workplace; high risk	Workers/Health and Safety (Workers)	0.00478	h		none		(2;3;4;1;3)
Right of Association; no risk	Workers/Freedom of association and coll...	0.00478	h		none		(2;3;3;1;4)
Right of Collective bargaining; no risk	Workers/Freedom of association and coll...	0.00478	h		none		(2;3;3;1;4)
Right to Strike; no risk	Workers/Freedom of association and coll...	0.00478	h		none		(2;3;3;1;4)
Sanitation coverage; very low risk	Local Community/Safe and healthy living...	0.00478	h		none		(2;1;2;1;0)
Sector average wage, per month; very low risk	Workers/Fair Salary	0.00478	h		none		(2;2;2;1;1)
Social responsibility along the supply chain; very high risk	Value Chain Actors/Promoting social resp...	0.00478	h		none		(2;4;2;1;2)
Social security expenditures; low risk	Workers/Social benefits, legal issues	0.00478	h		none		(2;1;4;1;4)
Trade union density; very high risk	Workers/Freedom of association and coll...	0.00478	h		none		(2;2;4;1;5)
Trafficking in persons; very low risk	Workers/Forced Labour	0.00478	h		none		(2;1;1;1;0)
Unemployment rate in the country; low risk	Local Community/Local Employment	0.00478	h		none		(2;1;1;1;0)

Screenshot from openLCA

Updated indicators

- Current sources and data were used
 - Either same sources as before or other sources that suit better
- More current values
- Larger country and/ or sector coverage
- Other calculation of indicator values
- Adapted evaluation of risks
- Updated risk scales

*Changes documented in PSILCA manual
(Eisfeldt, Ciroth 2017)*

[Changes to PSILCA version 1:

- *More current values for most countries*
- *Larger country coverage*
- *Updated risk scale]*

New indicators

- 12 new indicators:

Stakeholder	Subcategory	Indicator	Unit of measurement
Workers	Discrimination	Women in the sectoral labour force	ratio
		Men in the sectoral labour force	ratio
Value chain actors	Promoting social responsibility	Social responsibility along the supply chain	# per 100,000 employees
Society	Health and Safety	Life expectancy at birth	Years
	Contribution to economic development	Contribution of the sector to economic development	% of GDP
Local communities	Safe and healthy living conditions	Contrib. of sector to env. load, CO, I-AIR-CO_agg	kg, emission to air, total
		Contrib. of sector to env. load, NMVOC, I-AIR-NMVOC_agg	kg, emission to air, total
		Contrib. of sector to env. load, NOx, I-AIR-NOx_agg	kg, emission to air, total
		Contrib. of sector to env. load, PM10, I-AIR-PM10_agg	kg, emission to air, total
		Contrib. of sector to env. load, SO2, I-AIR-SO2_agg	kg, emission to air, total
		Contrib. of sector to env. load, CO2-equiv, I-GHG-CO2eTOTAL_agg	kg, emission to air, total, CO2 equiv.
Consumers	Transparency	Presence of business practices deceptive or unfair to consumers	# per 10,000 employees

- Total of 65 indicators addressing 19 subcategories and 5 stakeholders

New indicators documented in PSILCA manual (Eisfeldt, Ciroth 2017)

4.3.2.2 **New indicator: Life expectancy at birth**

This indicator is useful to reveal critical living conditions in different countries and as an indication of a good/ bad national health system.

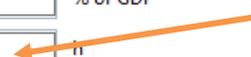
Positive evaluation: Process

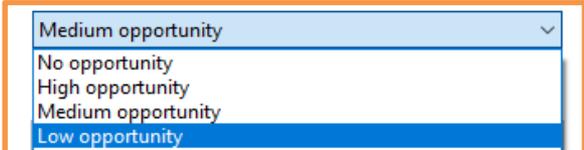
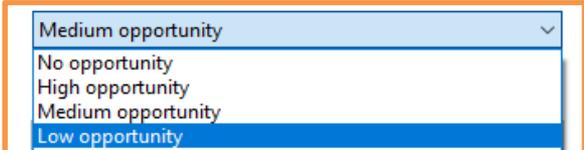
Indicator: *Contribution of the sector to economic development*

LCA ×

Contribution of the sector to economic development

Raw value: % of GDP

Activity variable (Working hours): h 

Risk level:  

Source:

Comment:

Data quality:

Reliability of the source(s)

Completeness conformance					
Temporal conformance					
Geographical conformance					
Further technical conformance					

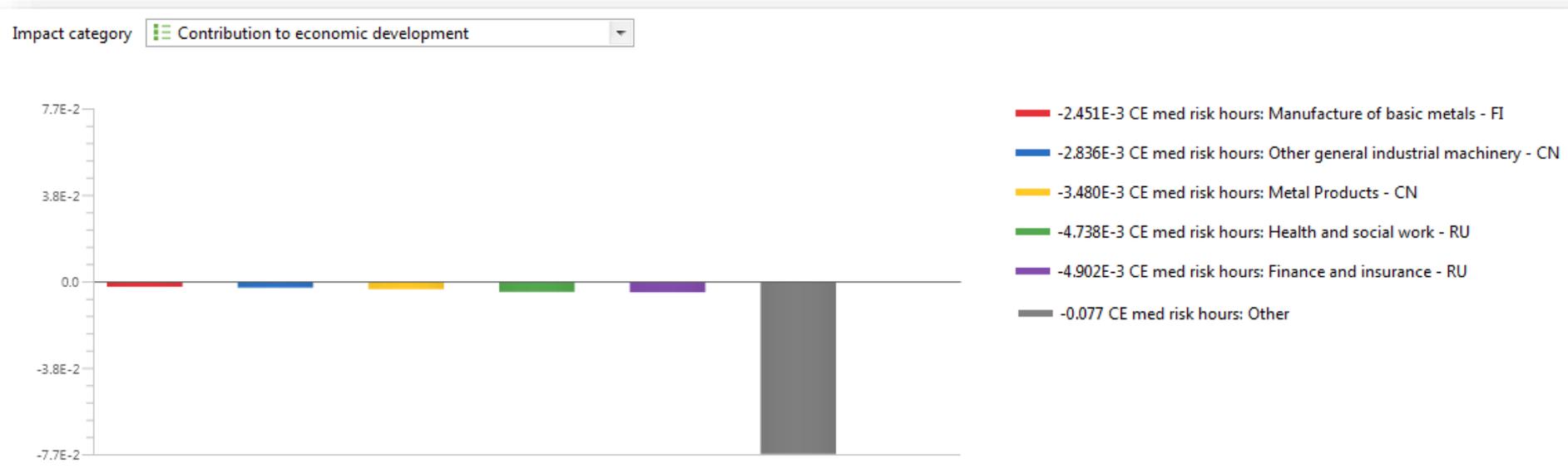
Screenshots from openLCA

 Children in employment, total; no risk	Workers/Child labour	0.00478	 h
 Contribution of the sector to economic development; medium opportunity	Society/Contribution to economic development	-0.00478	 h
 Contribution of the sector to environmental load, CO, I-AIR-CO_agg; low risk	Local Community/Safe and healthy living conditions	0.00478	 h



Positive evaluation: Results

Top 5 direct process contributions



Screenshot from openLCA

Positive evaluation: Results

Impact contributions

Name	Category	Inventor...	Impact factor	Impact re...	Unit
▲ Contribution to economic development				-0.09528	CE med
▲ Finance and insurance - RU	Russia / Industries			-0.00490	CE med
Contribution of the sector to economic development; high opportunity	Society / Contributi...	-0.00049 h	10.00000 CE me...	-0.00490	CE med
▲ Health and social work - RU	Russia / Industries			-0.00474	CE med
Contribution of the sector to economic development; high opportunity	Society / Contributi...	-0.00047 h	10.00000 CE me...	-0.00474	CE med
▲ Metal Products - CN	China / Commoditi...			-0.00348	CE med
Contribution of the sector to economic development; high opportunity	Society / Contributi...	-0.00035 h	10.00000 CE me...	-0.00348	CE med
▷ Other general industrial machinery - CN	China / Commoditi...			-0.00284	CE med
▷ Manufacture of basic metals - FI	Finland / Industries			-0.00245	CE med
▷ Manufacture of basic metals - FI	Finland / Commodi...			-0.00237	CE med
▷ Other special industrial equipment - CN	China / Commoditi...			-0.00231	CE med

Contribution tree

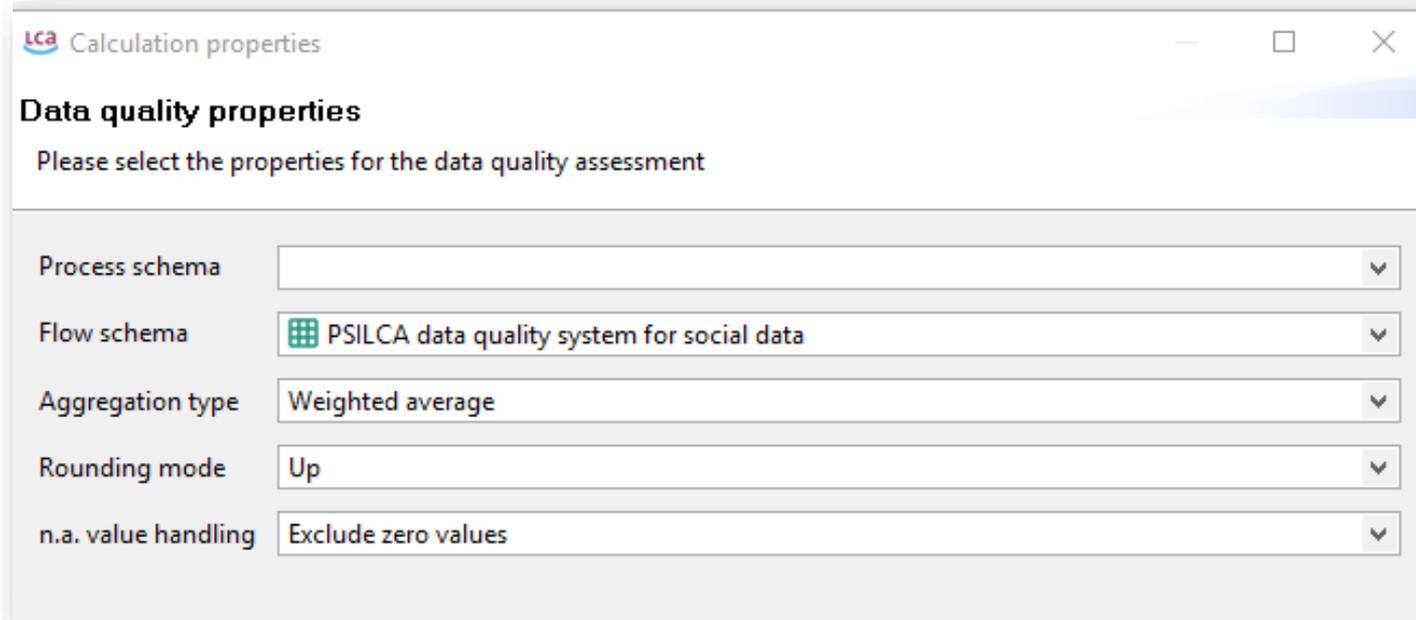
● Impact category Contribution to economic development

Contribution	Process	Amount	Unit
▼ -100.00%	Manufacture of beverages - DE	-0.00658	CE med risk hours
00.00%	Manufacture of beverages - DE	-0.00000	CE med risk hours
-18.14%	Accommodation and restaurants - DE	-0.00119	CE med risk hours

Calculation with data quality

▼ Indicators & Scores					
	1	2	3	4	5
Reliability of the source(s)	Statistical study, or verified data from primary data collection from several sources	Verified data from primary data collection from one single source or non-verified data from primary sources, or data from recognized secondary sources	Non-verified data partly based on assumptions or data from non-recognized sources	Qualified estimate (e.g. by expert)	Non-qualified estimate or unknown origin
Completeness conformance	Complete data for country-specific sector / country	Representative selection of country-specific sector / country	Non-representative selection, low bias	Non-representative selection, unknown bias	Single data point / completeness unknown
Temporal conformance	Less than 1 year of difference to the time period of the dataset	Less than 2 years of difference to the time period of the dataset	Less than 3 years of difference to the time period of the dataset	Less than 5 years of difference to the time period of the dataset	Age of data unknown or data with more than 5 years of difference to the time period of the dataset
Geographical conformance	Data from same geography (country)	Country with similar conditions or average of countries with slightly different conditions	Average of countries with different conditions, geography under study included, with large share; or country with slightly different conditions	Average of countries with different conditions, geography under study included, with small share; or not included	Data from unknown or distinctly different regions
Further technical conformance	Data from same technology (sector)	Data from similar sector, e.g. within the same sector hierarchy; or average of sectors with similar technology	Data from slightly different sector, or average of different sectors, sector under study included, with large share	Average of different sectors, sector under study included, with small share; or not included	Data with unknown technology / sector or from distinctly different sector

Calculation with data quality



lca Calculation properties

Data quality properties

Please select the properties for the data quality assessment

Process schema	<input type="text"/>
Flow schema	<input type="text" value="PSILCA data quality system for social data"/>
Aggregation type	<input type="text" value="Weighted average"/>
Rounding mode	<input type="text" value="Up"/>
n.a. value handling	<input type="text" value="Exclude zero values"/>

Screenshots from openLCA

Calculation with data quality

Inventory results

Name	Category	Sub-category	Amount	Unit	R	C	T	G	F
> Presence of sufficient safety measures; high risk	Workers	Health and Safety (Workers)	0.00538	h	1	2	1	4	2
> Presence of sufficient safety measures; medium risk	Workers	Health and Safety (Workers)	0.00119	h	1	2	1	4	2
> Public expenditure on education; high risk	Society	Contribution to economic development	0.00658	h	1	1	4	1	
> Public sector corruption; low risk	Value Chain Actors	Corruption	0.00658	h	4	3	1	1	
> Rate of fatal accidents at workplace; very low risk	Workers	Health and Safety (Workers)	0.00658	h	2	3	4	1	3
> Rate of non-fatal accidents at workplace; high risk	Workers	Health and Safety (Workers)	0.00658	h	2	3	4	1	3
> Right of Association; no risk	Workers	Freedom of association and collective b...	0.00658	h	2	3	3	1	4
> Right of Collective bargaining; no risk	Workers	Freedom of association and collective b...	0.00658	h	2	3	3	1	4
> Right to Strike; no risk	Workers	Freedom of association and collective b...	0.00658	h	2	3	3	1	4
> Sanitation coveraæ: very low risk	Local Community	Safe and healthv living conditions	0.00658	h	2	1	2	1	

Screenshots from openLCA

Calculation with data quality

Impact assessment

Name	Category	Inventory result	Impact fac...	Impact result	Unit	R	C	T	G	F
▶ Trade unionism				4.75824	TU ..	2	2	4	1	5
▶ Social responsibility along the supply chain				4.25214	SR ..	2	4	2	1	2
▶ Sanitation coverage				4.05952	SC ..	2	1	2	1	
▶ Non-fatal accidents				3.00488	NFA ..	2	3	5	1	2
▶ Active involvement of enterprises in corruption and bribery				2.21009	AI ...	2	2	2	2	3
▶ Contribution to environmental load				2.07539	CS ..	2	2	2	1	1
▶ Women in the sectoral labour force				2.05034	W ...	2	2	2	1	2
▶ Public sector corruption				1.98710	C m ..	4	3	1	1	
▲ Certified environmental management system				1.93374	CM ..	1	4	2	1	4
▲ P Manufacture of parts and accessories for motor vehicles and their engine	USA / Industries			0.05046	CM ..	1	5	2	1	4
F Certified environmental management systems; very high risk	Local Communit...	0.00050 h	100.00000 C...	0.05046	CM ..	1	5	2	1	4
▲ P Manufacture of parts and accessories for motor vehicles and their engine	USA / Commodit...			0.04679	CM ..	1	5	2	1	4
F Certified environmental management systems; very high risk	Local Communit...	0.00047 h	100.00000 C...	0.04679	CM ..	1	5	2	1	4
▲ P Metallurgy products - ES	Spain / Commod...			0.04350	CM ..	1	5	2	1	4
F Certified environmental management systems; very high risk	Local Communit...	0.00044 h	100.00000 C...	0.04350	CM ..	1	5	2	1	4
▶ P Manufacture of fabricated metal products, except machinery and equipr	Portugal / Comm...			0.04238	CM ..	1	5	2	1	4
▶ P Manufacture of fabricated metal products, except machinery and equipr	Portugal / Industr...			0.04141	CM ..	1	5	2	1	4
▶ P Other general industrial machinery - CN	China / Commod...			0.03465	CM ..	1	5	2	1	4

Screenshots from openLCA

Value added as activity variable

- Value added provided as alternative activity variable
- Calculated as difference between inputs and outputs of each process
- Measured in USD

▼ Outputs

Flow	Category	Amount	Unit
Active involvement of enterprises in corruption and bribery; medium risk	Value Chain Actors/Corruption	0.45204	USD
Certified environmental management systems; high risk	Local Community/Access to material resources	0.45204	USD
Children in employment, female; no risk	Workers/Child labour	0.45204	USD
Children in employment, male; no risk	Workers/Child labour	0.45204	USD
Children in employment, total; no risk	Workers/Child labour	0.45204	USD
DALYs due to indoor and outdoor air and water pollution; very low risk	Workers/Health and Safety (Workers)	0.45204	USD
Drinking water coverage; very low risk	Local Community/Safe and healthy living conditions	0.45204	USD
Evidence of violations of laws and employment regulations; medium risk	Workers/Social benefits, legal issues	0.45204	USD
Extraction of biomass (related to area); very high risk	Local Community/Access to material resources	0.45204	USD
Extraction of biomass (related to population); low risk	Local Community/Access to material resources	0.45204	USD
Extraction of fossil fuels; medium risk	Local Community/Access to material resources	0.45204	USD

Screenshot from openLCA

Value added as activity variable

Value Added

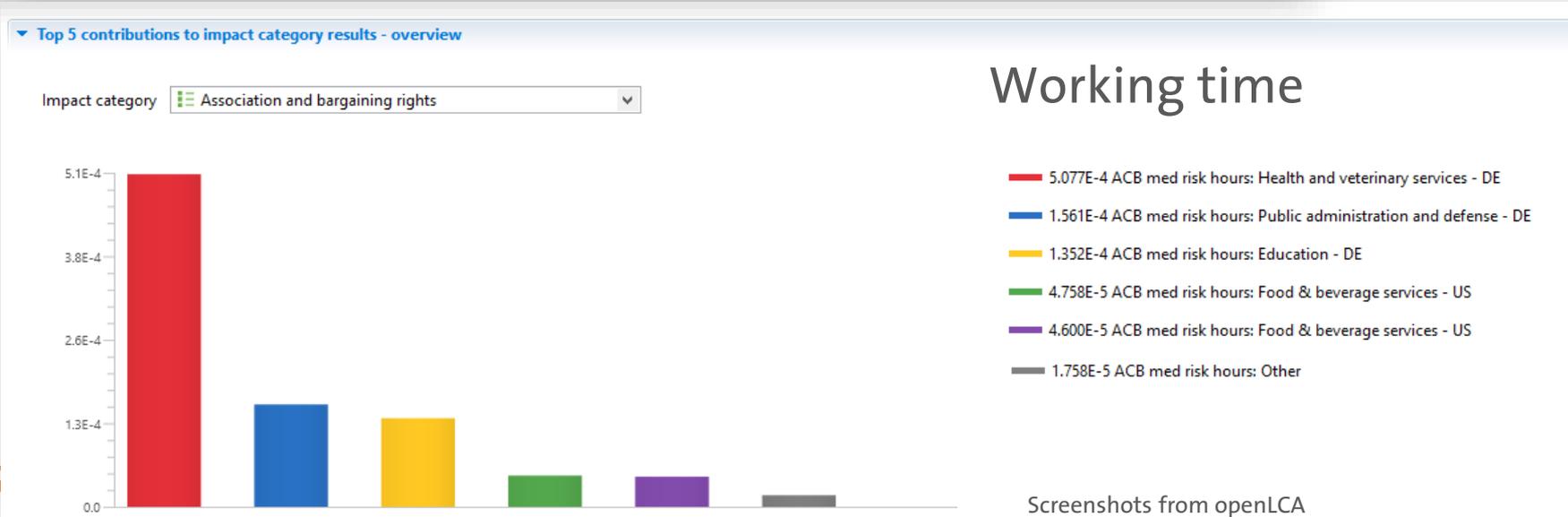
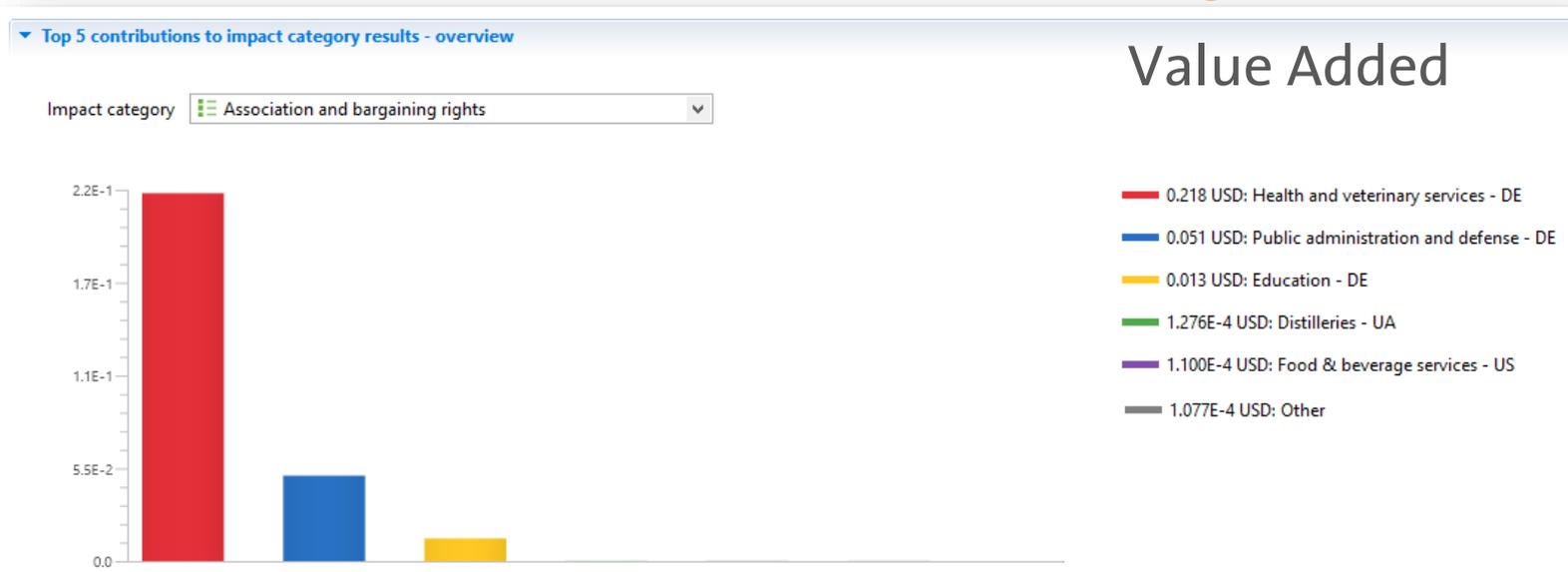
Working time

Name	Impact result	Unit
> Active involvement of enterprises in corruption and bribery	0.54980	USD
> Anti-competitive behaviour or violation of anti-trust and monopoly legislation	0.28423	USD
> Association and bargaining rights	0.28242	USD
> Biomass consumption	4.35150	USD
> Certified environmental management system	1.19371	USD
> Child Labour, female	0.00136	USD
> Child Labour, male	0.00136	USD
> Child Labour, total	0.00136	USD
> DALYs due to indoor and outdoor air and water pollution	0.13971	USD
> Drinking water coverage	0.14084	USD
> Education	0.56924	USD
> Fair Salary	3.87326	USD
> Fatal accidents	0.14040	USD
> Fossil fuel consumption	0.53394	
> Frequency of forced labour	0.14653	
> Gender wage gap	1.14640	
> Goods produced by forced labour	0.00000	
> Health expenditure	1.12641	
> Illiteracy, female	0.14206	
> Illiteracy, male	0.14172	
> Illiteracy, total	0.14172	
> Indigenous rights	0.06316	
> Industrial water depletion	5.35282	

Name	Impact res...	Unit
> Active involvement of enterprises in corruption and bribery	0.00636	Al med ri...
> Anti-competitive behaviour or violation of anti-trust and monopoly legislation	0.00396	AC med r...
> Association and bargaining rights	0.00091	ACB med...
> Biomass consumption	0.05827	BM med r...
> Certified environmental management system	0.02110	CMS med...
> Child Labour, female	6.01807E-5	CL med ri...
> Child Labour, male	6.01807E-5	CL med ri...
> Child Labour, total	6.01807E-5	CL med ri...
> DALYs due to indoor and outdoor air and water pollution	0.00195	DALY me...
> Drinking water coverage	0.00203	DW med ...
> Education	0.00810	E med ris...
> Fair Salary	0.01915	FS med ri...
> Fatal accidents	0.00198	FA med ri...
> Fossil fuel consumption	0.00717	FF med ri...
> Frequency of forced labour	0.00236	FL med ri...
> Gender wage gap	0.01447	GW med ...
> Goods produced by forced labour	0.00000	GFL med ...
> Health expenditure	0.01594	HE med ri...
> Illiteracy, female	0.00202	I med risk...
> Illiteracy, male	0.00200	I med risk...
> Illiteracy, total	0.00200	I med risk...
> Indigenous rights	0.00215	IR med ris...

Screenshots from openLCA

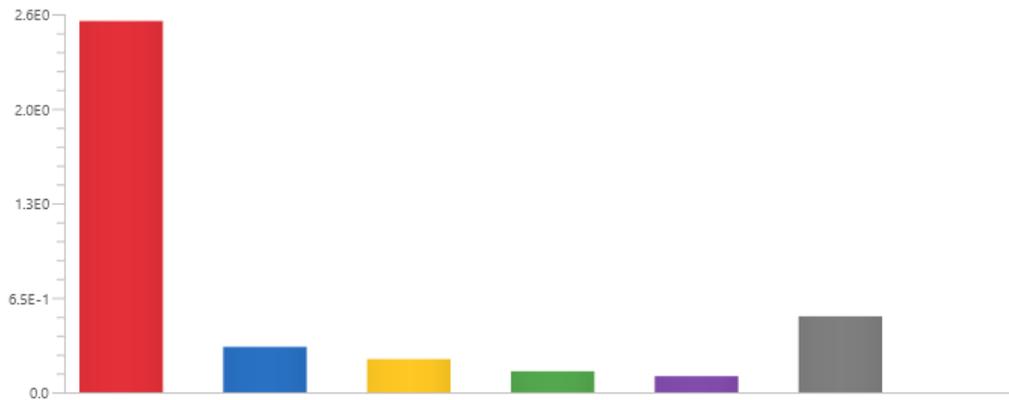
Value added as activity variable



Value added as activity variable

Top 5 contributions to impact category results - overview

Impact category: Fair Salary

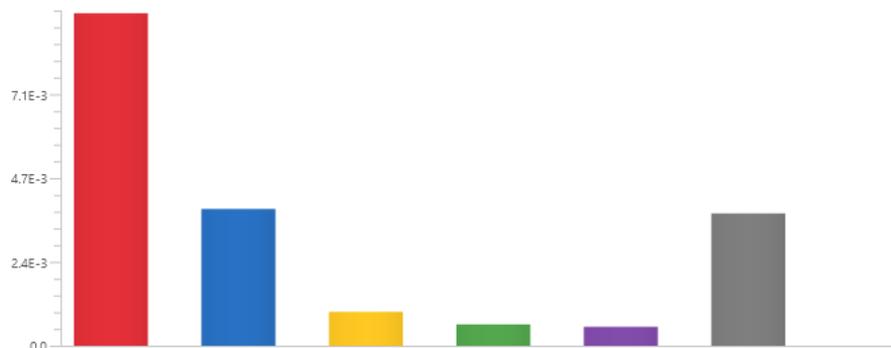


Value Added

- 2.553 USD: Manufacture of beverages - DE
- 0.313 USD: Restaurants - GB
- 0.229 USD: Re-export - NL
- 0.145 USD: Restaurants - GB
- 0.111 USD: Manufacture of food products and beverages - NL
- 0.523 USD: Other

Top 5 contributions to impact category results - overview

Impact category: Fair Salary



Working time

- 9.421E-3 FS med risk hours: Manufacture of beverages - DE
- 3.876E-3 FS med risk hours: Accommodation and restaurants - DE
- 9.603E-4 FS med risk hours: Restaurants - GB
- 6.044E-4 FS med risk hours: Restaurants - GB
- 5.378E-4 FS med risk hours: Hotels and motels, with restaurant (licensed) - GB
- 3.750E-3 FS med risk hours: Other

Life Cycle Impact Assessment

Characterization factors

Usually the following factors are used

Risk level	Factor
Very low risk	0.01
Low risk	0.1
Medium risk	1
High risk	10
Very high risk	100
No risk/ opportunity	0
Low opportunity	0.1
Medium opportunity	1
High opportunity	10
No data	0.1



PSILCA variants

PSILCA variants

- Database available in 3 different variants – Starter, Professional, Developer – distinguished by:
 - Completeness of data (regarding the valuation basis)
 - Data quality information
 - Applied cut-off criterion

PSILCA variants

Features

	Starter	Professional	Developer	SimaPro
Risk-assessed indicators	✓	✓	✓	✓
General information about sources	✓	✓	✓	✓
Raw values (initial values)	-	✓	✓	-
Information about data quality per process	-	-	✓	-
Possibility to change risk levels on process level	✓	✓	✓	✓
Possibility to change overall risk evaluation scheme	-	✓	✓	-
Cut-off	1E-5	1E-7	none	1E-4



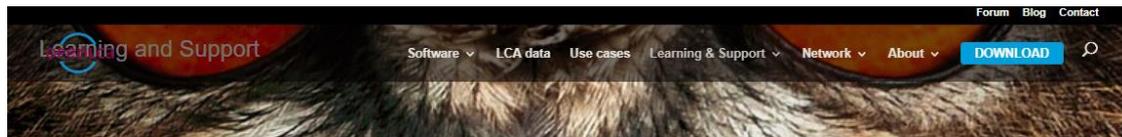
More information

More information

PSILCA manual:

Ciroth, A./ Eisfeldt, F. (2017): *PSILCA – A Product Social Impact Life Cycle Assessment database. Database version 2.0. Documentation*

available at: <https://psilca.net/> and <http://www.openlca.org/learning/>



Free resources

To help you get started with openLCA, we are providing many free resources, from manuals on the software to handbooks on specific topics, to guidance on impacts assessment methods and some ready to use case studies to get inspiration on modeling your own LCA study.



Manuals and presentations

Sometimes it is good to have a more comprehensive text which explains details – this section contains some manuals for different openLCA versions and related, typically more specific, topics. Also the format converter documentation is available.

openLCA, general

Specific topics

Databases

Presentations

Format converter



Learning and Support

Free resources

Manuals

Case studies

Videos

Trainings

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Which social phenomena are considered to be important and have to be observed in a study might differ between projects, societies or even researchers. Therefore, many projects about social impacts of products start with yet another compilation and synopsis of social measures. A final, agreed list of indicators does not exist yet. In order to make the database broadly applicable, PSILCA aims to **cover all social aspects that are nowadays in discussion**.

The current, first version of the database contains information on 54 qualitative and quantitative social aspects addressing 18 subcategories. These subcategories relate to four main stakeholders: workers, value chain actors, local community, and society.



Learn more

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Prices and further description under:

<https://nexus.openlca.org/database/PSILCA>



Info Details Use advice

PSILCA is a new database for social LCA developed by GreenDelta. It contains comprehensive generic inventory information for almost 15,000 industry sectors and commodities, for calculating and assessing social impacts of products along their life cycles, and for detecting social hotspots.

Each PSILCA database licence includes a free, web-based 2-hour introductory course, provided by social LCA specialists experienced in using the database.

Note: If you want to upgrade an existing PSILCA Starter or Professional licence, please contact us directly under nexus@greendelta.com.

If you consider to provide data for PSILCA, please contact us directly under psilca@greendelta.com. Depending on your contribution, we will offer a discount of up to 75% on your database licence.

Ordering databases is also possible outside of Nexus. Additional fees may apply. Please see [here](#) for more details. If you are interested, [send us a message](#).

PSILCA - Starter & SimaPro Database details



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Pictures of transition slides:

- Picture 1: http://www.dtoday.de/cms_media/module_img/749/374687_1_ressort_51f7b43cf3e48.jpg, last access: 27.08.2015
- Picture 2: https://c2.staticflickr.com/8/7206/6986180861_c5ebaf9634_b.jpg, last access: 27.10.2015