Sustainable Leather Foundation

2-Day Inception Workshop

Addis Ababa, Ethiopia
18-19th November 2024

INDUSTRY LED – CONSUMER FOCUSED – TRANSPARENCY YOU CAN SEE

WWW.SUSTAINABLELEATHERFOUNDATION.COM

Introduction

- Founder and Managing Director of Sustainable Leather Foundation.
- UN/CEFACT Consultant, United Nations European Commission for Europe –
  - Leather Value Chain Expert, working on the project to ''Enhance Transparency & Traceability in the Garment and Footwear Sector''
  - Leather Value Chain Expert, working on the UN/CEFACT Core Component Library
- Vice-President of the Society of Leather Technologists and Chemists (SLTC)
- Practitioner Member of the Chartered Quality Institute (PCQI) and a Qualified SA8000 Social Systems Lead Auditor
- Liveryman of the Worshipful Company of Curriers
- Previously, 5 years managing the Leather Working Group

Deborah Taylor, PQCI
Managing Director,
Sustainable Leather
Foundation

Introduction

Zain Akber,
Head of Auditing Services,
Sustainable Leather Foundation

- 5th Generation Leather Industry Family
- Early Career as Chemical Quality and Procurement Manager in tanneries, with over a decade of experience working inside tanneries before concentrating on supporting ESG improvement
- IEMA qualified Principal Lead Environmental Auditor, ISO14001, ISO 45001 and an SA8000 Social Leather Auditor.
- Has been successfully consulting tanneries to achieve LWG status for the last 8 years.

Agenda Day 1

10.00 am	Introductions
10.15 am	What is sustainability and unpacking ESG
11.00 am	Why is ESG important: incoming regulation
11.30 am	*Break*
11.50 am	Introduction to US Hide quality and characteristics
12.10 pm	Introduction to the Sustainable Leather Foundation
12.30 pm	*Lunch*
14.00 pm	Environmental Module: key requirements and expectations
15.30 pm	*Break*
15.50 pm	Environmental Module continues
17.00 pm	*End Day 1*

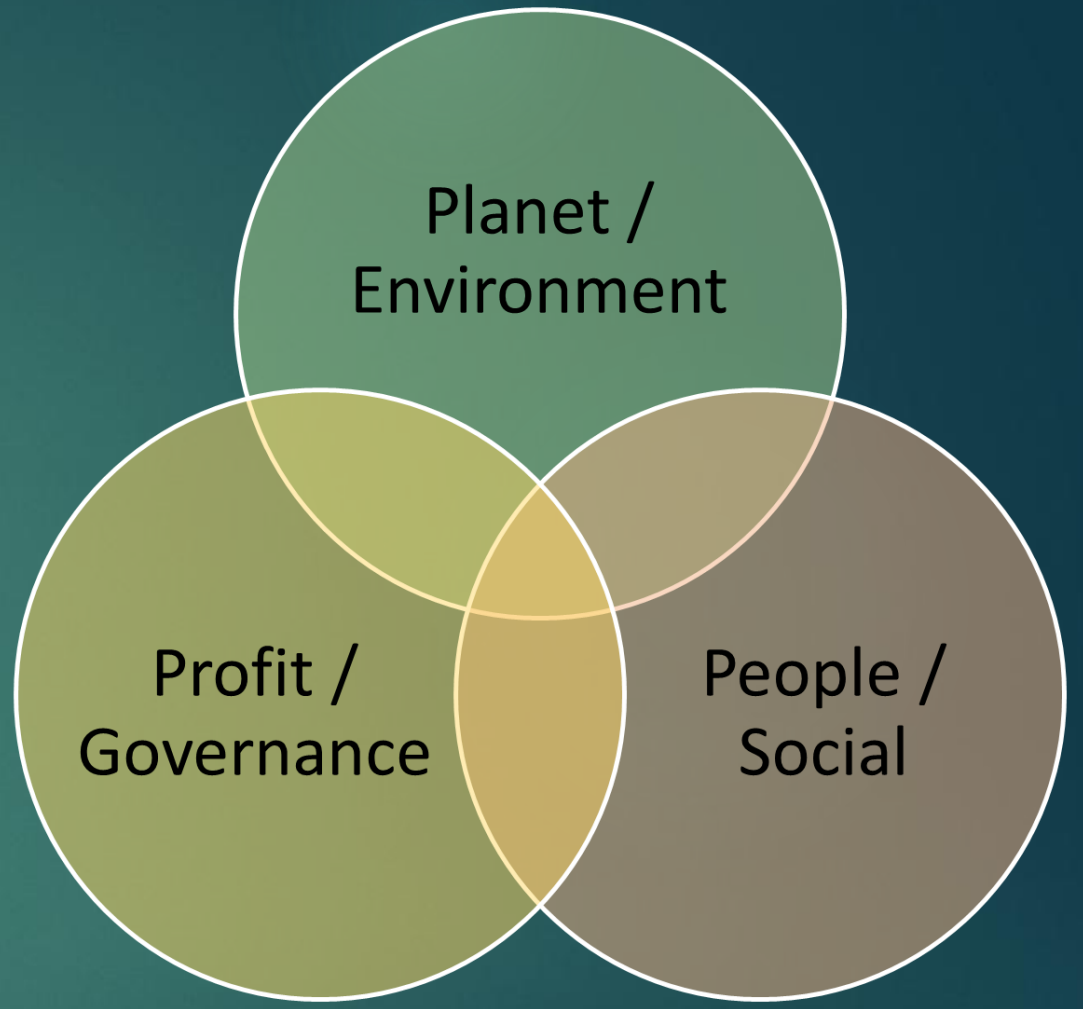
“let’s be the change that secures the future”

Session 1, Part 1: What is Sustainability? Unpacking ESG Incoming regulation

What is sustainability?

The first real definition of sustainability, devised within the United Nations Brundtland Commission report “Our Common Future” in 1987 as **“meeting the needs of the present without compromising the ability of future generations to meet their own needs.”**

Sustainability can be broken down into 3 principal pillars, known as “ESG” – Environment, Social and Governance, or put another way, Planet, People and Profit.



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Let's break down ESG risks

Environmental / Planet	Social / People	Governance / Profit
• Deforestation and Biodiversity • Energy Consumption • Water Use • Harmful Chemicals • Air & Noise Emissions • Water Pollution • Land Pollution • Solid Waste • Greenhouse Gas Emissions	• Child labour • Compulsory labour • Discrimination • Unfair wages • Safety & Health • Excessive working hours • Corporate social responsibility	• Ethical Business Practice • Animal Welfare • Housekeeping • Process and Quality Control • Restricted Substance and Chemical control • Occupational Safety and Health

1. Farming of Livestock

2. Slaughter

3. Hide/Skin Preservation

4-8.Raw to Finished Manufacture of Leather

9. Product Assembly, Dispatch & Warehousing

10. Fulfilment & Retail

11. Post Consumption

4. Raw to Tanned Process

5. Splitting, shaving & Sorting

6. Retanning, Fatliquoring & Crust

7.Dyeing, Setting Out, Samming

8. Drying, Conditioning, Softening & Finishing

Possible Subcontract operations

Colour Key:

- Upstream Processes
- Direct Processes
- Downstream Processes

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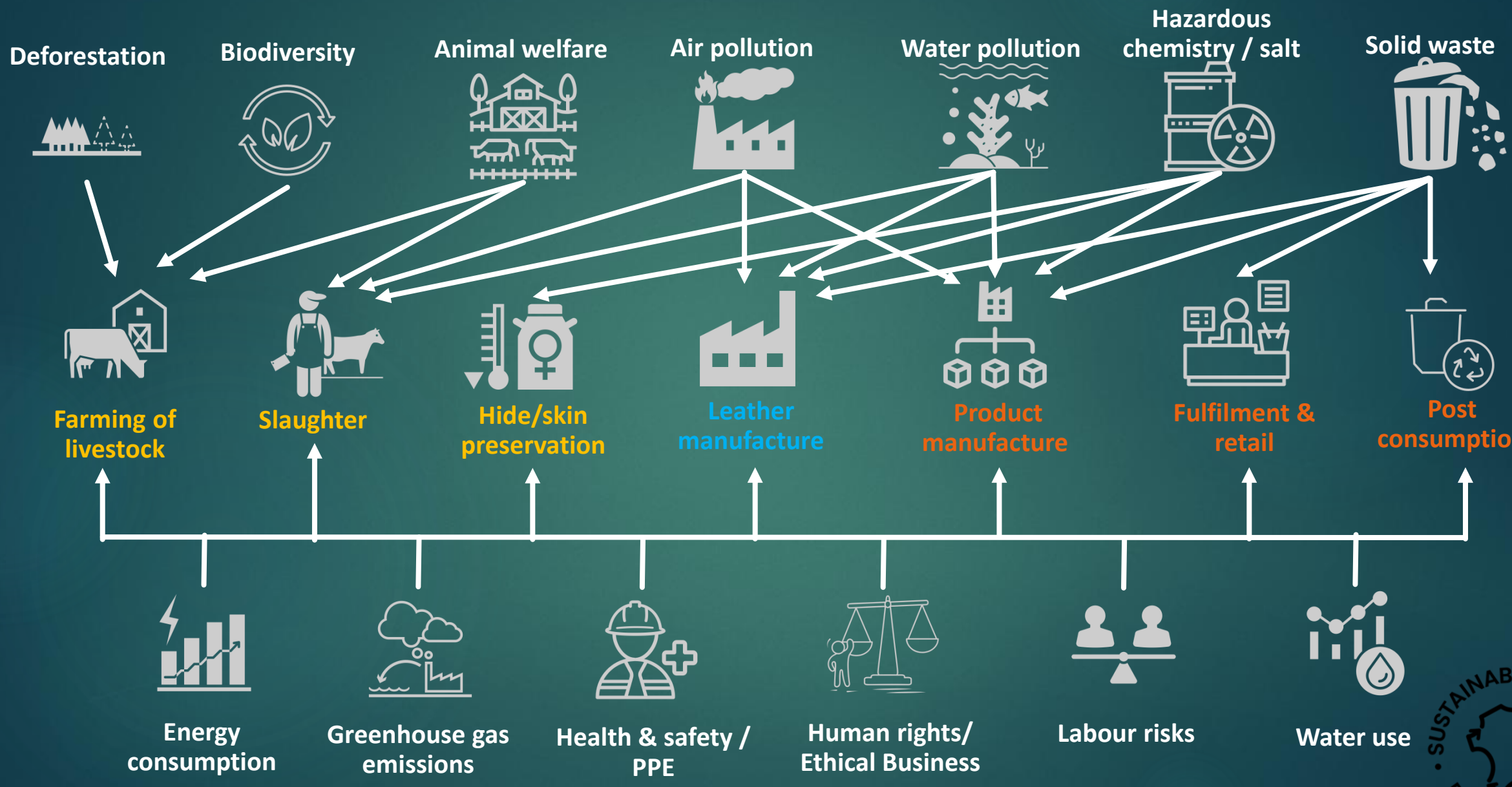
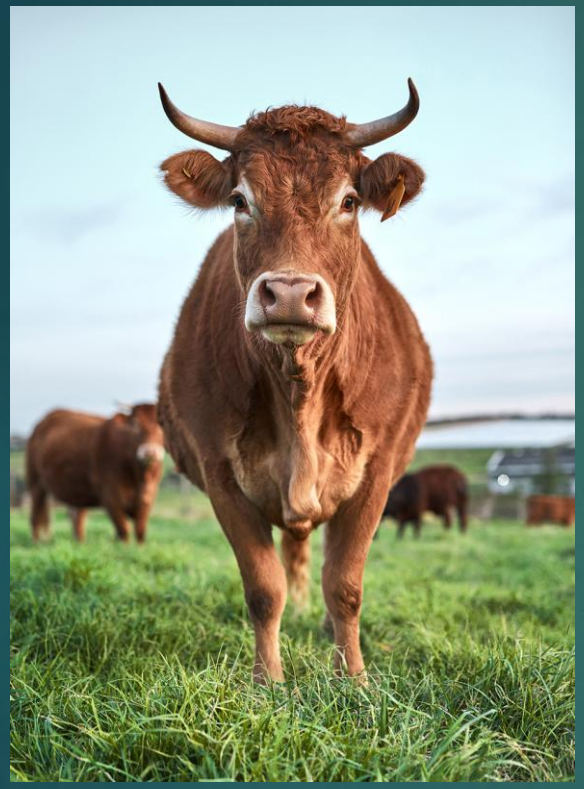
Flowchart of Key Processes in Leather Manufacture

Sustainability Risks in the Leather Value Chain



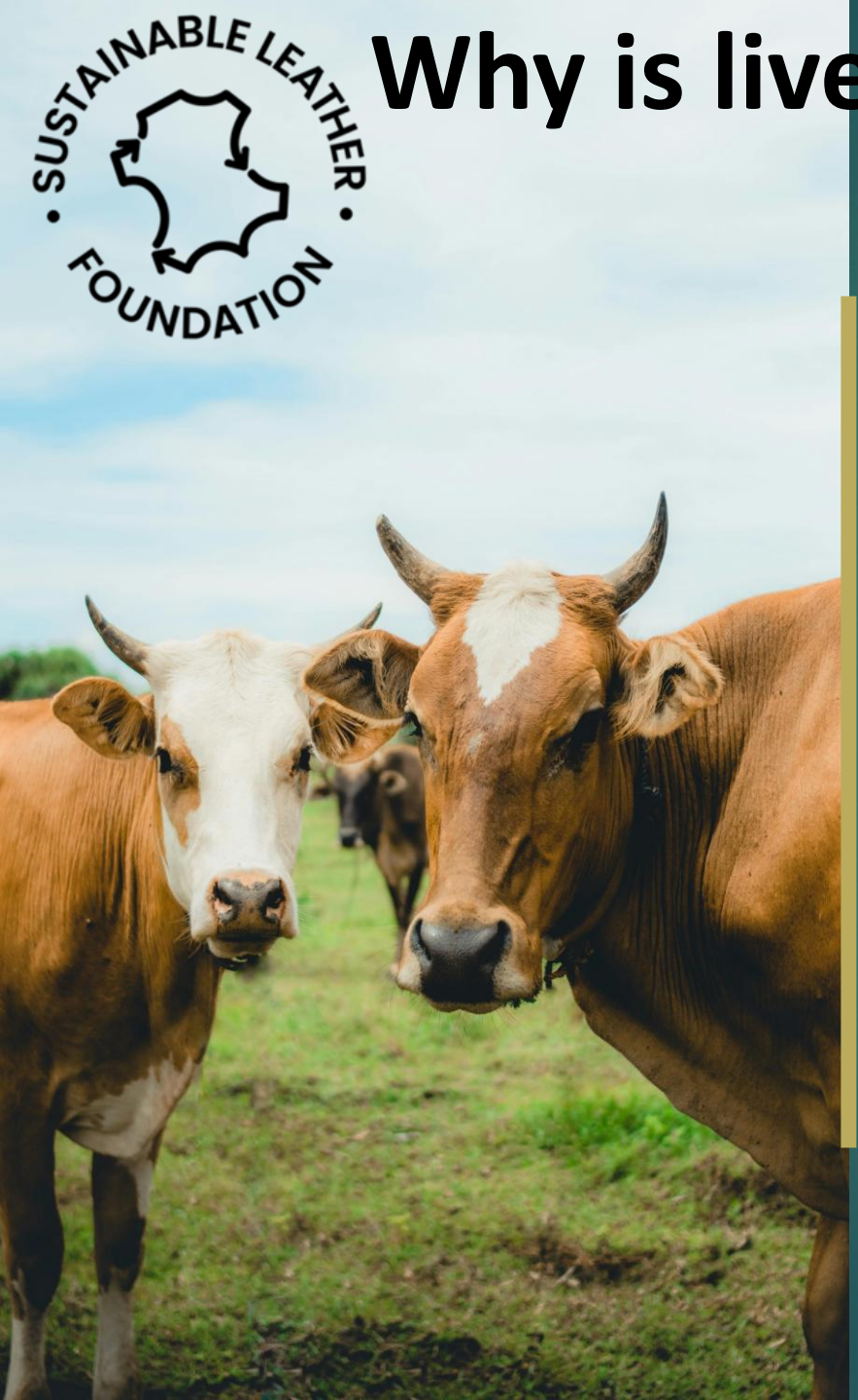
How does leather meet the definition?



Raw Input Material:

- Mother Nature provides. Animals reproduce naturally
  - We care for them in life – They care for us in death
    - Good animal welfare
    - Rotational farming for land and soil health
  - Wider Risks
    - Deforestation
    - Loss of habitats / shifts in biodiversity
    - Methane emissions

Why is livestock management so important?



Livestock are part of the natural sustainable eco-system.
Without livestock we have:

- **No** meat for the dietary need of a global population
- **No** raw material for the leather industry
- **No** natural fertilization of the land
- **No** natural deterrent to invasive species
- **No** natural encouragement of beneficial species

Livestock farming can support carbon reduction by:

- Soil Carbon Sequestration: Well-managed grazing can improve soil health and increase the amount of carbon stored in the soil. Healthy pastures also help pull CO_2 from the atmosphere.
- Rotational Grazing: By rotating livestock between pasture areas, vegetation has time to recover, and soil carbon storage can increase, while overgrazing, which leads to land degradation, is minimized.

How does leather meet the definition?

Leather Manufacture:

- The biggest factors that affect sustainability arise during the manufacturing stages:
  - Use of Chemicals
  - Pollution:
    - Air Emissions
    - Noise Emissions
    - Soil Pollution
    - Water Pollution
  - Natural Resource Depletion:
    - Energy (fossil fuels)
    - Water
  - Human Rights
    - Modern Slavery
    - Health & Safety of Workers
    - Bribery & Corruption

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Why are we being faced with regulation?

For decades we have:

Over produced

Over consumed

Over polluted

ECONOMIES HAVE BEEN DRIVEN BY PROFIT AT THE EXPENSE OF PLANET AND PEOPLE.

VOLUNTARY STANDARDS HAVE ONLY BEEN SUCCESSFUL TO A SMALL DEGREE

NOW LEGISLATION IS FORCING CHANGE.

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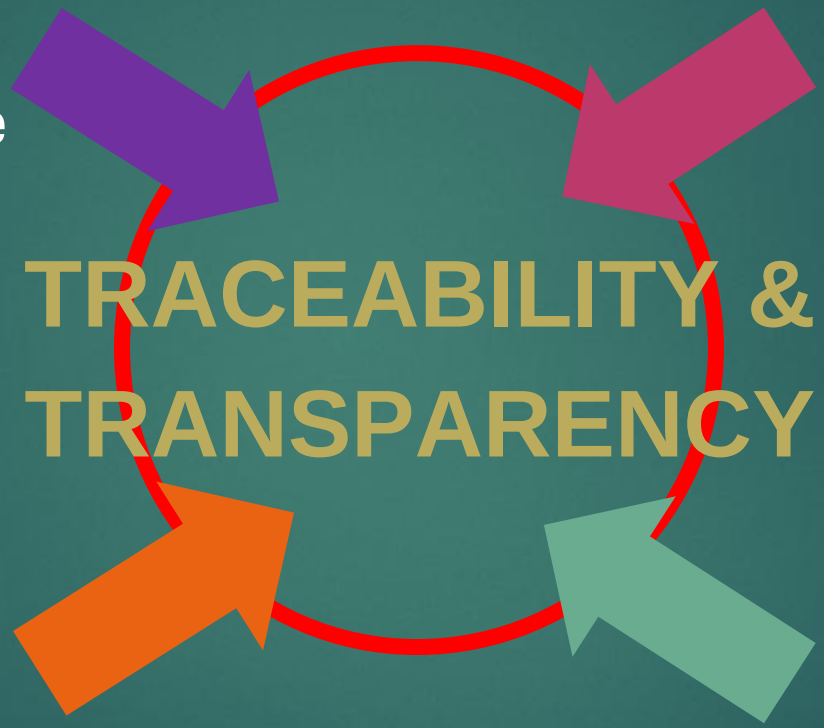
EU Directives and Regulations

01 EU Corporate Sustainability Reporting Directive

EU CSRD

02 EU Corporate Sustainable Due Diligence Directive

EU CSDDD



04 EU Green Claims Directive

EU GCD

03 EU Deforestation Regulation

EUDR

SUSTAINABLE LEATHER FOUNDATION

1. EU Corporate Sustainability Reporting Directive (EU CSRD)

Key Points:

- The Corporate Sustainability Reporting Directive was officially adopted and entered into force by the EU on 5th January 2023.
- This new requirement replaces the existing "Non-Financial Reporting" requirement and is intended to force organisations to actively report on their ESG (Environmental, Social and Governance risks, mitigation, objectives and KPIs.
- The rules will apply for the largest companies in 2024 for reporting in 2025 and will extend to full value chain accountability for all organisations by 2028.
- The new rules will ensure that investors and other stakeholders have access to the information they need to assess the impact of companies on people and the environment and for investors to assess financial risks and opportunities arising from climate change and other sustainability issues.

1. EU Corporate Sustainability Reporting Directive (EU CSRD)

Key Points:

- There are 1178 data points in total for CSRD, some mandatory and some voluntary across the following scope:

ESRS	DR	Paragraph	Name	Data Type	Appendix C (SFDR + PILLAR 3 + Benchmark + CL)	V [Voluntary]
E2	E2-1	14	Policies to manage its material impacts, risks and opportunities related to pollution [see ESRS 2 MDR-P]	MDR-P		
E2	E2-1	15 a	Disclosure of whether and how policy addresses mitigating negative impacts related to pollution of air, water and soil	narrative		
E2	E2-1	15 b	Disclosure of whether and how policy addresses substituting and minimising use of substances of concern and phasing out	narrative		
E2	E2-1	15 c	Disclosure of whether and how policy addresses avoiding incidents and emergency situations, and if and when they occur, c	narrative		
E2	E2-1	AR 12	Disclosure of contextual information on relations between policies implemented and how policies contribute to EU Action Plan	narrative		
E2	E2-2	18	Actions and resources in relation to pollution [see ESRS 2 MDR-A]	MDR-A		
E2	E2-2	19	Layer in mitigation hierarchy to which action can be allocated to (pollution)	semi-narrative		
E2	E2-2	AR 13	Action related to pollution extends to upstream/downstream value chain engagements	semi-narrative		
E2	E2-2	19	Layer in mitigation hierarchy to which resources can be allocated to (pollution)	semi-narrative		
E2	E2-2	AR 15	Information about action plans that have been implemented at site-level (pollution)	narrative		
E2	E2-3	22	Tracking effectiveness of policies and actions through targets [see ESRS 2 MDR-T]	MDR-T		
E2	E2-3	23 a	Disclosure of whether and how target relates to prevention and control of air pollutants and respective specific loads	narrative		
E2	E2-3	23 b	Disclosure of whether and how target relates to prevention and control of emissions to water and respective specific loads	narrative		
E2	E2-3	23 c	Disclosure of whether and how target relates to prevention and control of pollution to soil and respective specific loads	narrative		
E2	E2-3	23 d	Disclosure of whether and how target relates to prevention and control of substances of concern and substances of very high	narrative		
E2	E2-3	24	Ecological thresholds and entity-specific allocations were taken into consideration when setting pollution-related target	semi-narrative		V
E2	E2-3	24 a	Disclosure of ecological thresholds identified and methodology used to identify ecological thresholds (pollution)	narrative		V
E2	E2-3	24 b	Disclosure of how ecological entity-specific thresholds were determined (pollution)	narrative		V
E2	E2-3	24 c	Disclosure of how responsibility for respecting identified ecological thresholds is allocated (pollution)	narrative		V
E2	E2-3	25	Pollution-related target is mandatory (required by legislation)/voluntary	semi-narrative		
E2	E2-3	AR 17	Pollution-related target addresses shortcomings related to Substantial Contribution criteria for Pollution Prevention and Contro	semi-narrative		
E2	E2-3	AR 18	Information about targets that have been implemented at site-level (pollution)	narrative		

- Climate Change
- Pollution
- Water & Marine Resources
- Biodiversity & Ecosystems
- Resource Use & Circular Economy
- Own Workforce
- Workers in the Value Chain
- Affected Community
- Consumers & End Users
- Business Conduct

+ general disclosures are identified, and the minimum disclosure requirements outlined.

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1. EU Corporate Sustainability Reporting Directive (EU CSRD)

Timeline:

- for large EU "public interest entities" that are already subject to the NFRD
- non-EU companies listed on a regulated market in the EU within the definition of large undertakings with more than 500 employees

- for large EU organisations that are not presently subject to the NFRD
- large non-EU companies listed on a regulated market in the EU

- for listed EU and certain SMEs
- small and non-complex credit institutions and captive insurance undertakings

- for non-EU companies falling within the rules solely on account of the EU Turnover Test

2. EU Corporate Sustainability Due Diligence Directive (EU CSDDD)

Key Points:

- Adopted by the EU on 23 February 2022, The Corporate Sustainability Due Diligence Directive is concerned with the act of corporate due diligence across the ESG spectrum.
- It is a mandatory set of due diligence steps that companies who are eligible under the CSRD must legally take.
- In basic terms, companies will be obliged to investigate and address how their business operations and supply chains affect the wider environmental and human rights.
- The two Directives work hand in hand and should considered together.
- It doesn't just affect companies based in the EU – it also applies to non-EU countries, and it effects operations inside and outside of the EU.

2. EU Corporate Sustainability Due Diligence Directive (EU CSDDD)

Large EU Companies:

Group 1: Companies with 500+ employees and a net turnover of €150 million

Group 2: Companies in high-impact sectors with 250+ employees and a net turnover of €40 million. (High impact sectors include textiles, agriculture, extraction of minerals)

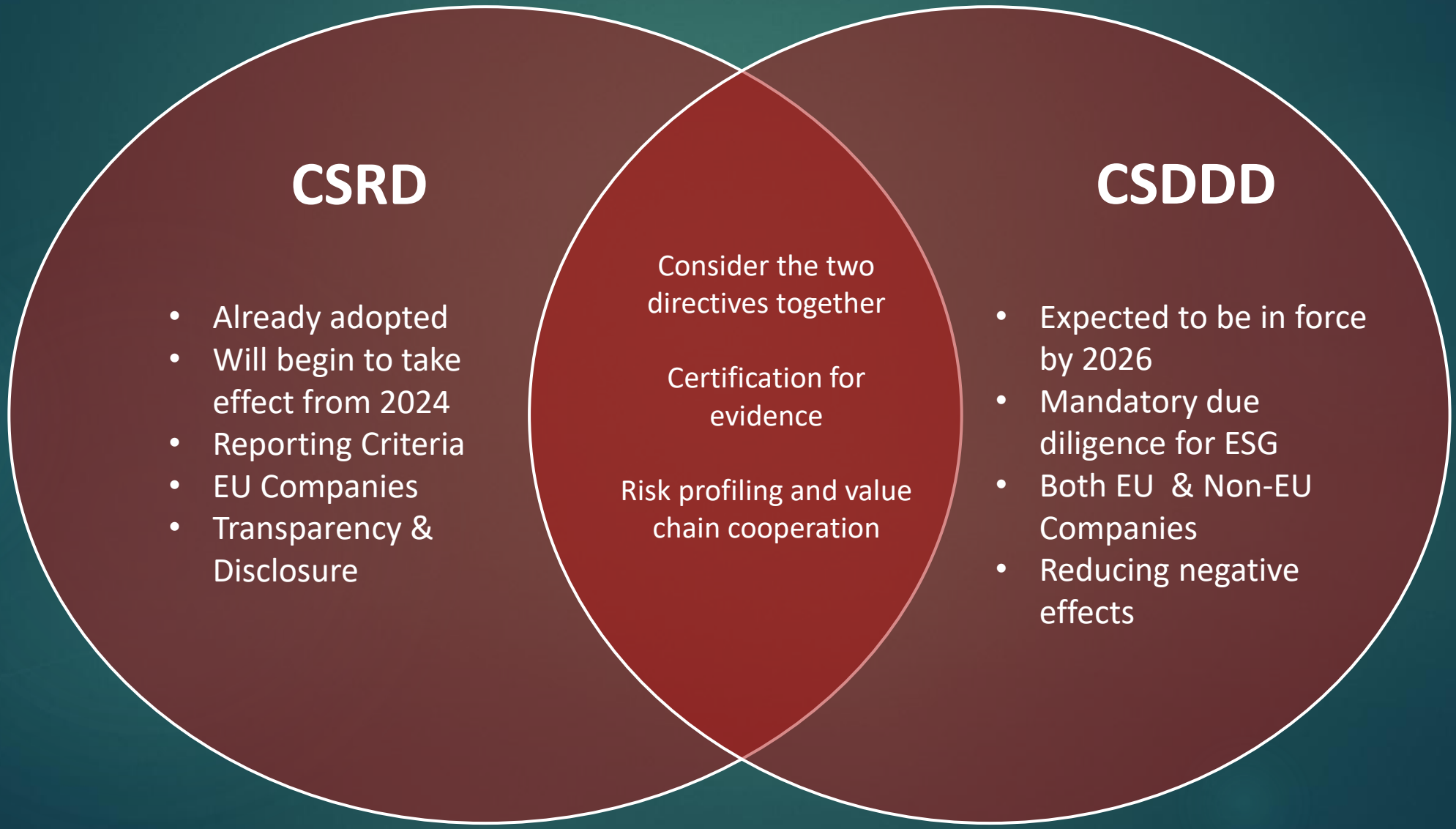
Group 2 obligations start 2 years later than Group 1

Non-EU Companies:

Companies who actively operate in the EU with turnover threshold that aligns with Group 1 and 2 within the EU list.

Although micro and SMEs are not directly subject to the rules, there are supporting measures being put in place for those companies that could be indirectly affected.

2. EU Corporate Sustainability Due Diligence Directive (EU CSDDD)



2. EU Corporate Sustainability Due Diligence Directive (EU CSDDD)

Timeline:

- Draft accepted by the EU on 22 February 2022
- CSDDD accepted as a negotiating text on 1 June 2023
- CSDDD officially adopted
- CSDDD will be mandatory for companies as outlined

3. EU Deforestation Regulation (EUDR)

Key Points:

- Entered into force on 29 June 2023, the new regulation on deforestation free products is developed with the aim of reducing greenhouse gases and biodiversity loss.

- It covers key commodities that include soy, beef, palm oil, wood, cocoa, coffee and rubber. It also includes the derived by-products such as leather, chocolate, tyres and furniture.

- For the leather value chain all materials are included:
  - Raw hides and skins (fresh, salted, dried, limed, pickled or otherwise preserved)
  - Tanned or crust hides and skins of cattle, without hair on, whether or not split, but nor prepared.
  - Leather of cattle, further prepared after tanning or crusting, including parchment-dressed leather, without hair on, whether or not split.

- These obligations extend to traders and manufacturers as well as brands to prove due diligence of deforestation-free supply chains

3. EU Deforestation Regulation (EUDR)

Obligations as an “Operator”:

STEP 1:

- Collection of information such as:
  - The type of commodity to be made available to the market or export
  - Quantity
  - Supplier
  - Country of production
  - Evidence of legal farming
  - Geographic coordinates of the plots of land where the commodity was produced / grazed.

STEP2:

- Record the information collected into a risk assessment due diligence system

STEP 3:

- Take adequate and proportionate mitigation measures in the event of finding under step 2, a more than negligible risk of non-compliance in order to make sure that the risk becomes negligible.

3. EU Deforestation Regulation (EUDR)

- To import or export commodities within the scope, operators will required a **Universal Unique Identifier (UUID)** for customs.
- This will be provided once the operator has uploaded a Due Diligence Statement (DDS) and Geolocation of all plots of land where the commodity has been raised/grown/produced into an information system that is currently in final stages of development.
- There are FAQs available but these are in the process of being updated.
- All geocoordinates will be uploaded using the GeoJSON format
- More training and information will be available during September / October 2024.
- Registration can start on 2nd December 2024
- Still lots of unknowns.

3. EU Deforestation Regulation (EUDR)

Implementation Date Extended by 12 months

Timeline:

- Regulation entered into force on 29 June 2023
- 30 December 2024 effective application for large and medium sized companies
- 30 June 2025 effective application date for micro and small enterprises
- 31st December 2020 is the sunset date for deforested land

THE OPERATOR BEARS THE BURDEN OF PROOF THAT THE MATERIAL, COMMODITY OR PRODUCT WAS PRODUCED BEFORE ENTRY INTO FORCE.

4. EU Green Claims Directive (EUGCD)

Key Points:

- Officially known as the Directive on the Verifiability and Communication of Environmental Product Claims.
- In 2020 there were around 230 active “ecolabels” in Europe, but the concern arises over whether consumers or companies can be sure that the claims are based on solid grounds.
- The EU found that 53% of the claims that it examined were vague, misleading or unfounded – and 40% were unsubstantiated.
- The proposed directive sets detailed rules around substantiating and communication explicit environmental claims about products, in business to consumer communications.
- It would apply to voluntary claims and labelling schemes.

4. EU Green Claims Directive (EUGCD)

Under the Directive, companies would have to carry out an assessment to substantiate explicit environmental claims and meet certain criteria

Additionally, companies would also have to comply with the following requirements:

- use equivalent information and data for the assessment;
- use data that is generated or sourced in an equivalent manner;
- cover the same stages along the value chain;
- cover the same environmental impacts, aspects or performances;
- use the same assumptions.

4. EU Green Claims Directive (EUGCD)

- Proposal for a Directive put forward on 22 March 2023
- Public Consultation ended 21 July 2023
- Draft report submitted on 9 November 2023
- Proposal adopted at the Plenary Session in March 2004 – awaiting implementation date (expected 2026).

If you can't prove it, don't say it!

Be Prepared

Other legislation and directives include:

- CBAM – Carbon Border Adjustment Mechanism
- New York State Senate “Fashion Sustainability and Social Accountability Act”
- UK Forest Risk Commodities Act
- Extended Producer Responsibility Directives, such as the EU Waste Directive

It is imperative that organisations understand where their risks are and how they can mitigate those risks without creating additional unintended consequences.

Break

20 minutes

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"let's be the change that secures the future"

Session 1, Part 2:

Introduction to US Hide Quality and Charactectistics

Introduction to Sustainable Leather Foundation


LEATHER AND HIDE
COUNCIL OF AMERICA
Quality Hides from the United States

American Hides

- Quality
- Supply
- Reliability
- Animal Care

American Quality

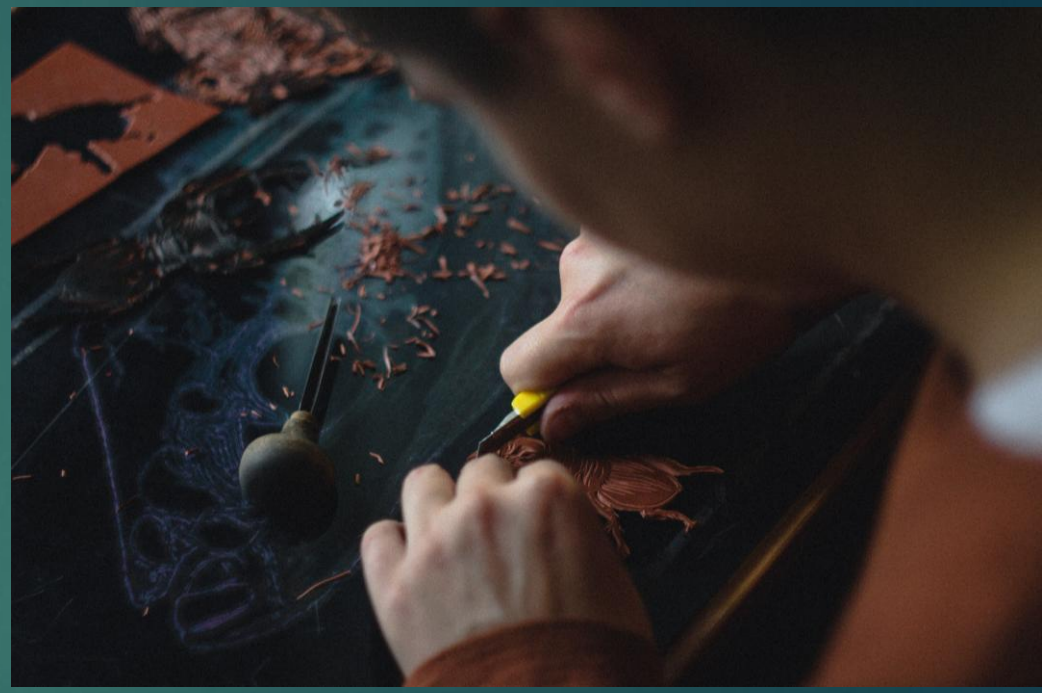
- Best quality hides
  - Temperate climate
  - Advanced animal husbandry
  - Specialized hide removal

American Supply

- Large beef production and consumption
- Significant hide supply for exports
- Just-in-time logistics
- Hide size and quality increase use rate by 15-20%

American Reliability

- Meet North American Cattle Hides Export Standards
- L&HCA provides recourse for dispute
- Consistent product and service



American Animal Care

- The Animal Welfare Act set standards animal care and treatment
- Slaughter Act regulations ensure proper treatment livestock
- Meat Institute Animal Handling Guidelines & Audit Guide support best practices

LEATHER AND HIDE

COUNCIL OF AMERICA

https://www.usleather.org

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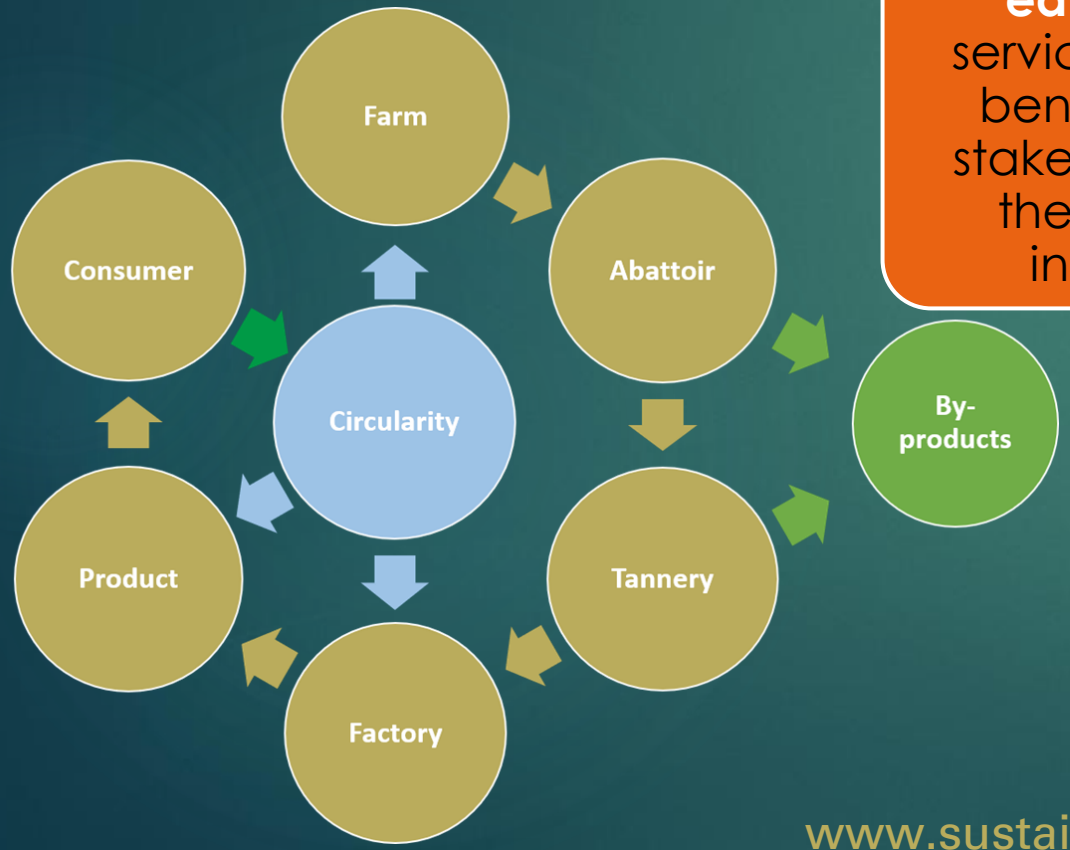
SLF's Core Vision

Transparency you can

Established in 2020 a global foundation providing **certification**, **equivalency** and **education** services for the benefit of all stakeholders in the leather industry.

At the heart of the foundation is the **SLF Transparency Dashboard™** that displays a holistic ESG profile for the leather value chain.

A **consumer accessible window** to sustainability linking the value chain to industry experts and innovative tools.



We provide tangible solutions for the whole leather value chain to communicate & build upon all your ESG requirements

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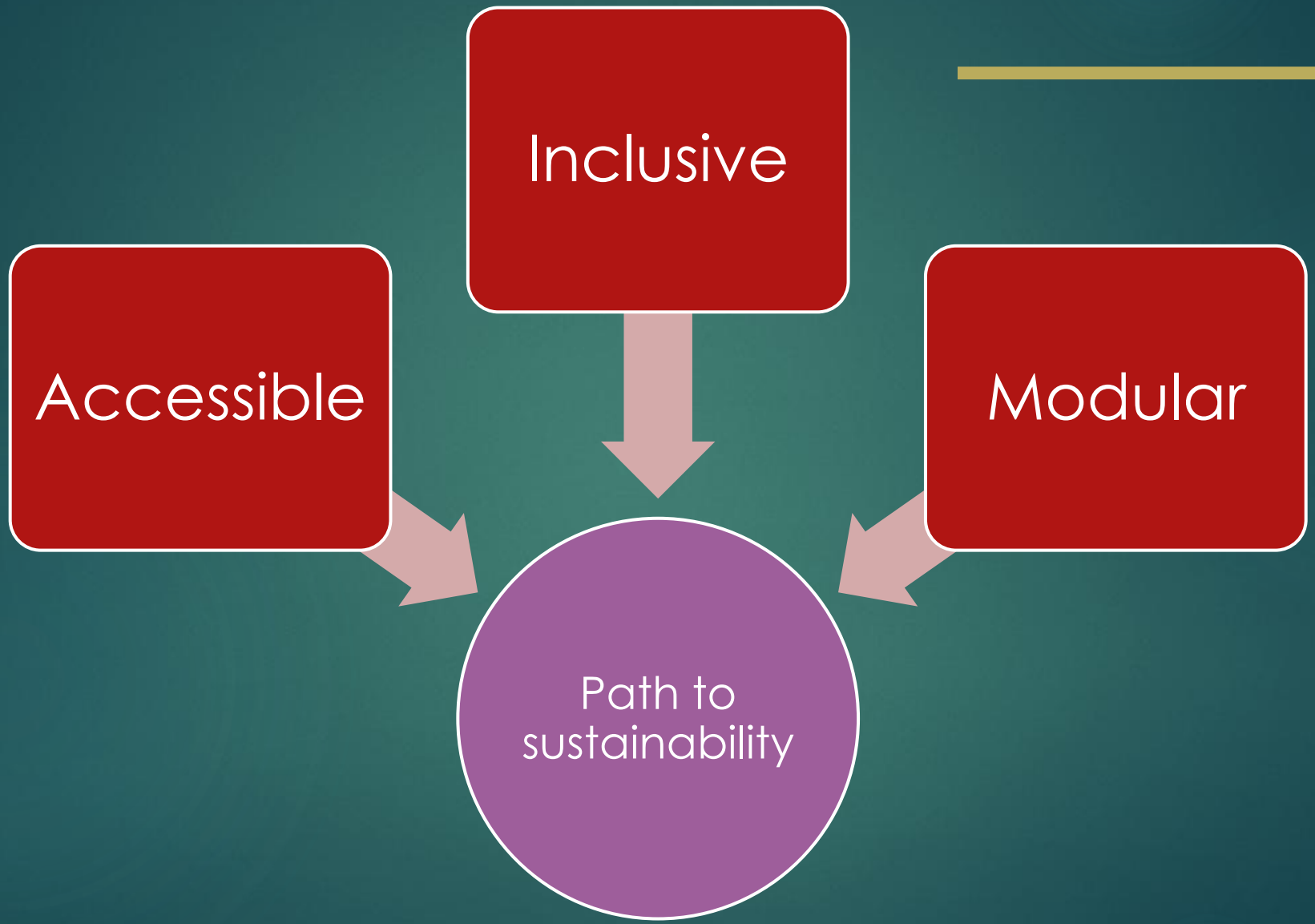
SLF's A.I.M. Approach



The A.I.M Approach – Accessible, Inclusive, Modular

October 2021

March 2022

June 2022

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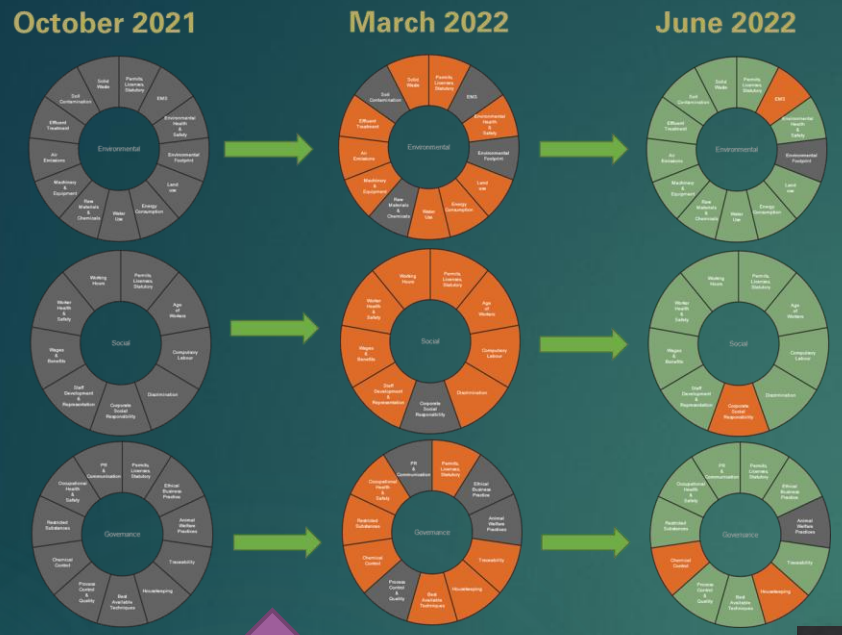


Guided support Leads to audit

(or equivalency mapping)

Audit leads to certification

Certification leads to customer information

Customer information accessed by QR technology

Continued progress maintained

Audit Standard Report

Audit Standard Review

- No complicated scoring. Evidence recorded to validate answer.
- Pre-audit questionnaire to include all basic company information.
- Pink indicates critical questions required for a “Pass” within each section. Green indicates an added value question.
- Dynamic environmental metrics tables so data can be demonstrated in the Dashboard.
- Equivalency with LWG for Social Audit to meet LWG requirements

Benchmarking – real data, real measurement

Water Consumption

WATER CONSUMPTION BENCHMARKING						
Operational Scope	Raw to Tanned	Raw to Crust	Raw to Finished	Tanned to Crust	Tanned to Finished	Crust to Finished
Unit of Measure	L/m^2	L/m^2	L/m^2	L/m^2	L/m^2	L/m^2
Average Benchmark	146	270	297	63	134	11
Average Actuals	**No Data Yet**	**109**	**127**	**29**	**55**	**9**
	**Average actuals to be used as directional reference only. Limited data set availabe; not statistically significant*					

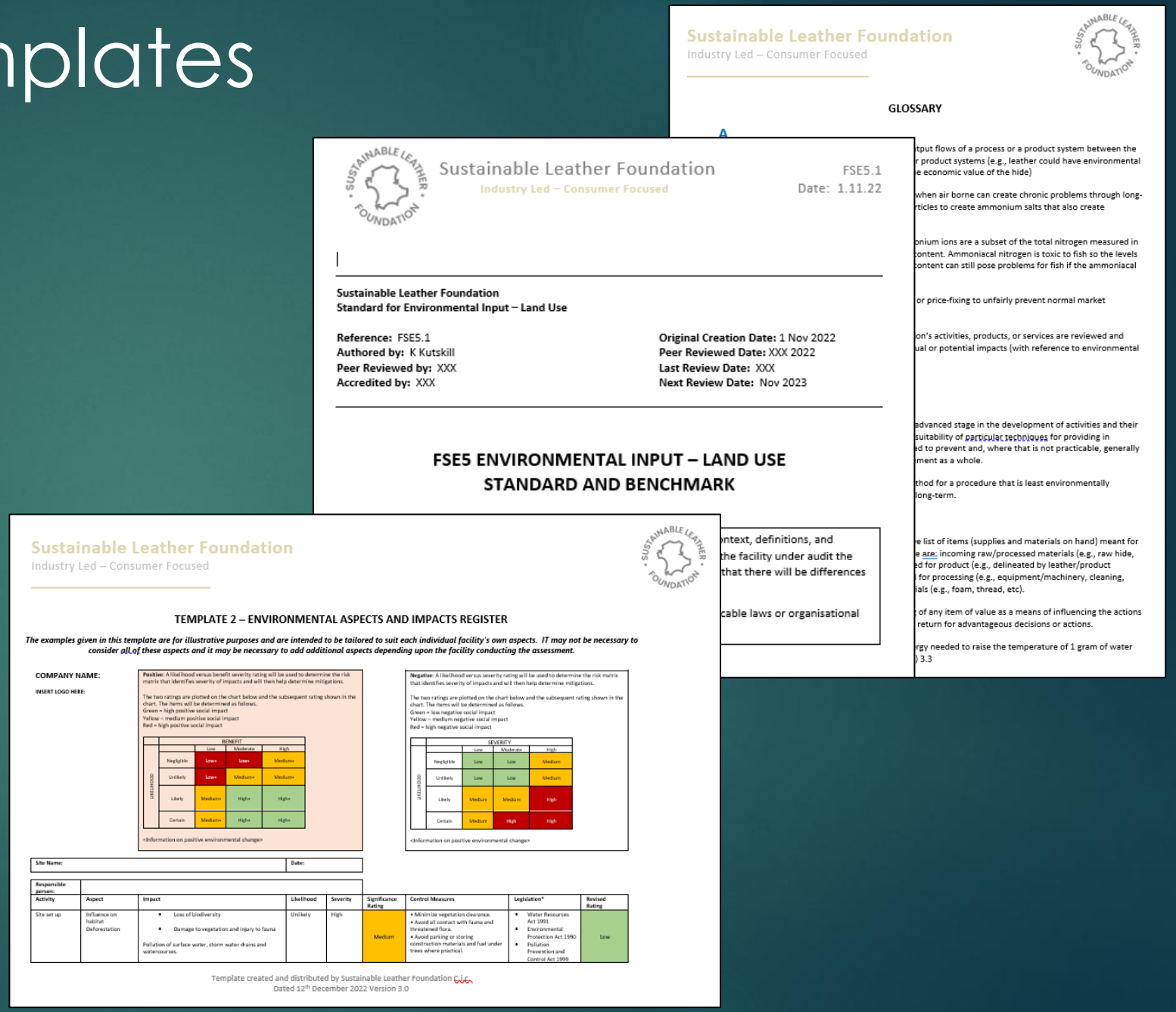
Energy Consumption

ENERGY CONSUMPTION BENCHMARKING						
Tannery Name	Raw to Tanned	Raw to Crust	Raw to Finished	Tanned to Crust	Tanned to Finished	Crust to Finished
Unit of Measure	kWh/m^2	kWh/m^2	kWh/m^2	kWh/m^2	kWh/m^2	kWh/m^2
Average Benchmark	4	13	21	7	14	8
Actuals Average	**1**	**2**	**11**	**5**	**15**	**8**
	**Average actuals to be used as directional reference only. Limited data set availabe; not statistically significant*					

Guidance & Templates

Technical Library

- Published Glossary of 120 Terms
- Comprehensive library of Standards & Benchmarks
- Downloadable Word and Excel Templates + Guidance Notes



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SLF Comparison Matrix with other certification standard owners

	Yes
	WIP - Some elements missing
	Not included
	Unknown
	Not a standard - benchmarking tool

	SLF	LWG	CSCB	Oeko-Tex STeP for leather	Oeko-Tex Made in Green	Oeko-Tex Detox to zero	ZDHC	ISO 9001	ISO 14001	ISO14040	ISO 45001	ISO 50001	SA 8000	Sedex SMETA 4 Pillar	Sedex SMETA 2 Pillar	LIA
Environmental Module																
Permits, licences, statutory - env																
Environmental Management Systems																
Environmental Health & Safety																
Environmental Footprint																
Land use																
Energy consumption																
Water use																
Raw materials and chemicals																
Equipment and machinery																
Air pollution																
Effluent																
Soil Contamination																
Solid waste																
Social Module																
Permits, licences, statutory - social																
Age of workers																
Compulsory labour																
Discrimination																
Corporate social responsibility																
Staff development and representation																
Wages & Benefits																
Worker Health & Safety																
Working hours																
Governance module																
Permits, licences, statutory - gov																
Ethical business practice																
Animal Welfare																
Traceability, procurement, and sales																
Housekeeeping																
BATNEEC/BPEO																
Process control, QMS,efficiency and productivity																
Chemical control																
Restricted substances																
Occupational Health & Safety																
Public relation and communications																

Value to you

Partnership for Sustainability

Low cost through guided support and more profit through efficiency and opportunity

Access to a triple pillar platform that opens visibility to international markets

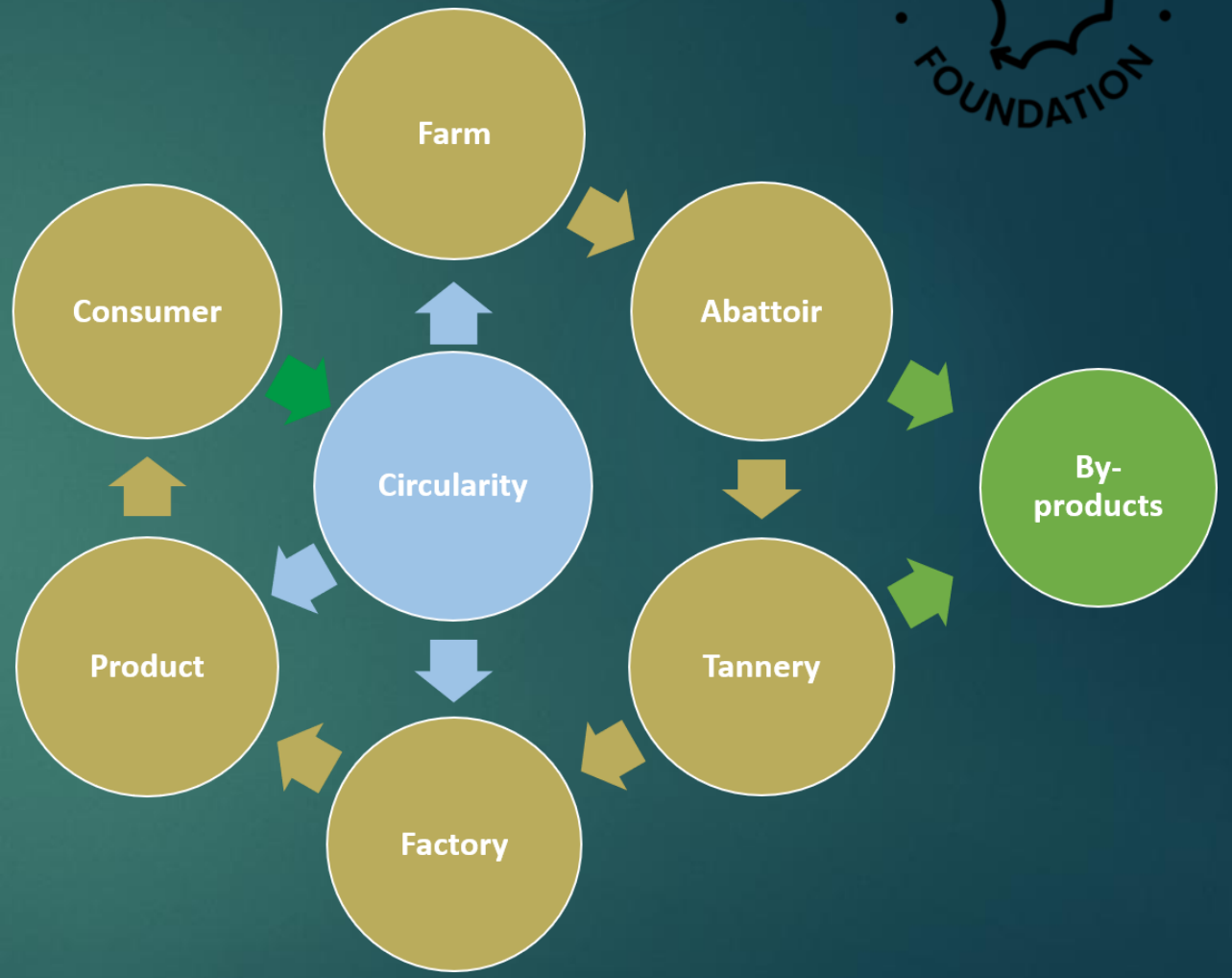
Value-Added cross product/discipline interconnections within facility and within industry

Responsibility

- Each process part of the value chain is integral to the success (or not) of a truly circular and sustainable model

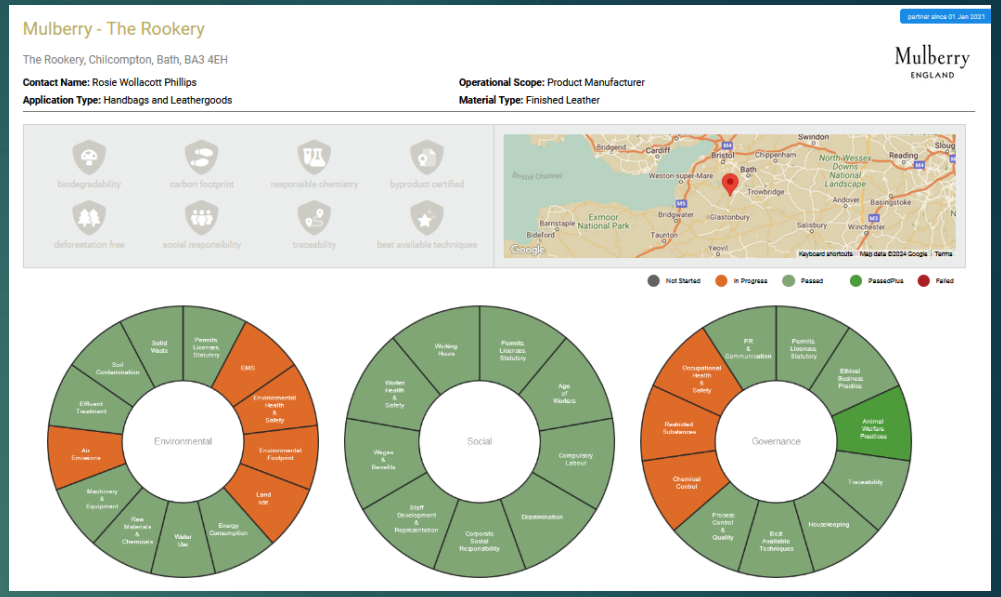
- Do not be responsible for creating a new problem through the desire to find a solution to the existing problem

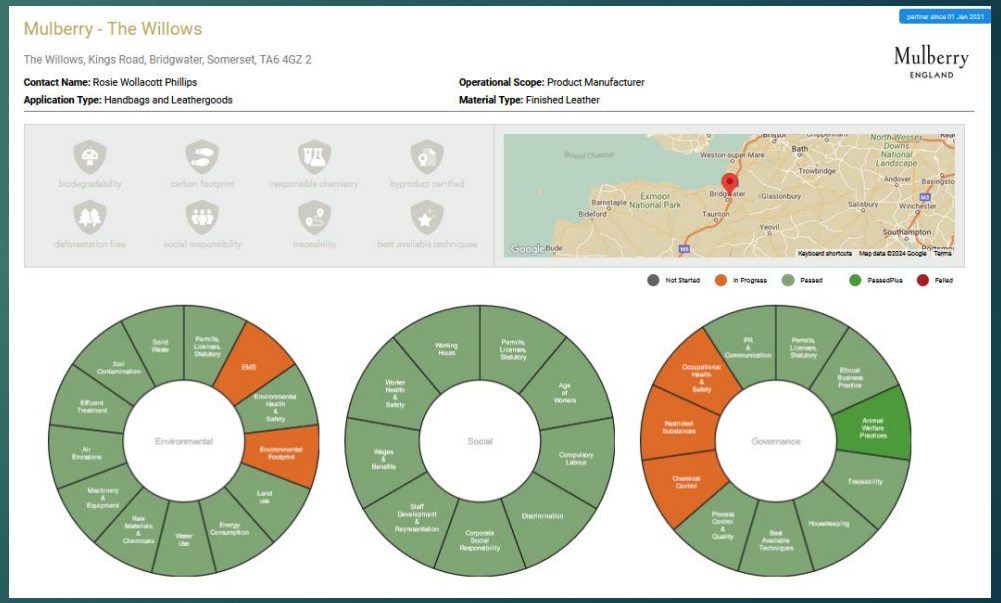
- Partnership is essential for:
  - Process
  - Technology
  - Education
  - Enforcement



Mulberry Case Study

- Founding Partner of SLF since 2020
- Rosie Wollacott Phillips, Mulberry's Group Sustainability Manager sits on the advisory board to provide brand representation and perspective
- Active leadership for sustainable improvement
- Undergoing audits of Mulberry facilities – not just expecting suppliers to do it.





SUSTAINABLE LEATHER FOUNDATION

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Mulberry Case Study

Your Profile

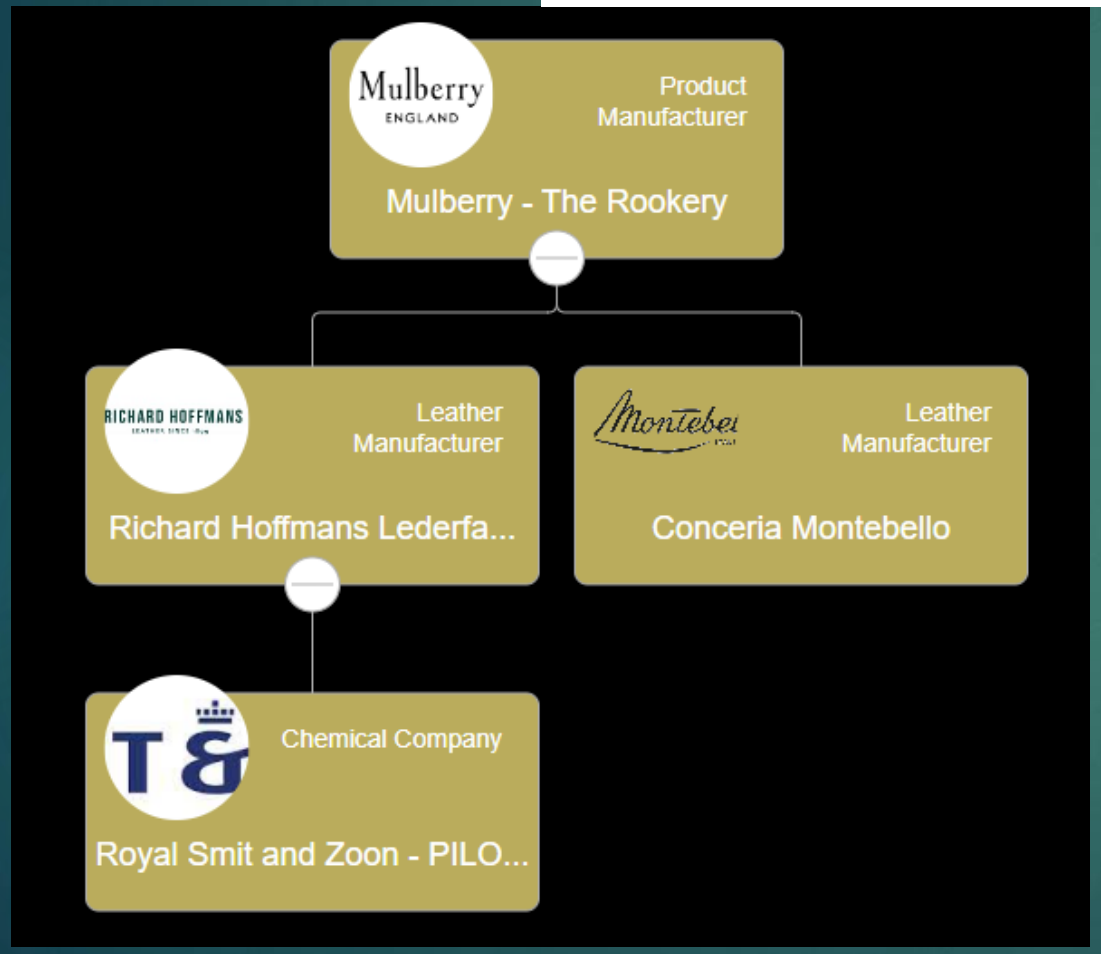
Rosie Wollacott

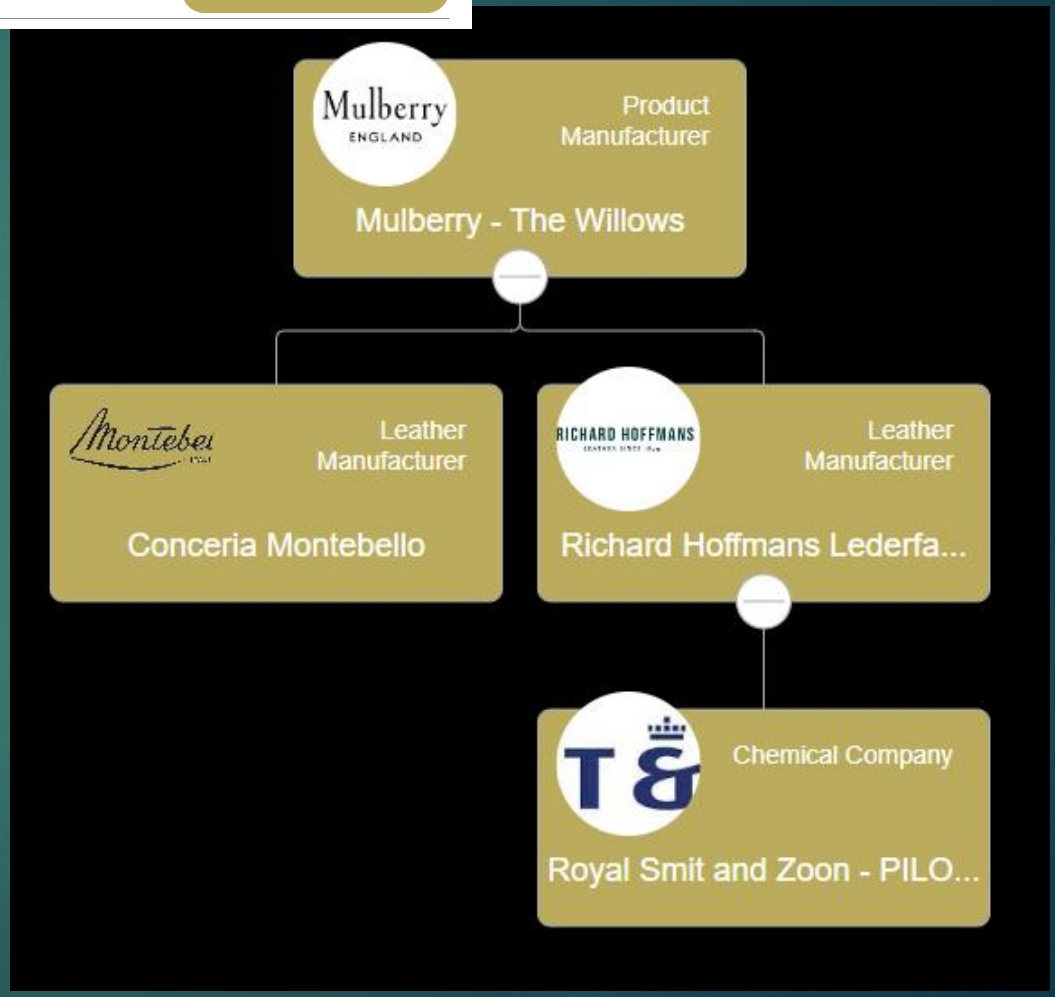
Mulberry

Mulberry Company (Design) Ltd
The Rookery Chilcompton Bath BA3 4EH

Your List

SEARCH OTHER COMPANIES →





LHCA Training Project Partner

Step 1: Workshops

Step 2: Preparatory Audits

Step 3: Development and Improvement

Step 4: Formal Audit and Certification

Step 5: Action Plan for Continued Development

Lunch

90 minutes

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Agenda Day 1

10.00 am	Introductions
10.15 am	What is sustainability and unpacking ESG
11.00 am	Why is ESG important: incoming regulation
11.30 am	*Break*
11.50 am	Introduction to US Hide quality and characteristics
12.10 pm	Introduction to the Sustainable Leather Foundation
12.30 pm	*Lunch*
14.00 pm	Environmental Module: key requirements and expectations
15.30 pm	*Break*
15.50 pm	Environmental Module continues
17.00 pm	*End Day 1*

"let's be the change that secures the future"

Session 2, Part 1: Environmental Module

Why have a Standard?

A complete non-commercial three pillar sustainability system did not exist for the leather industry
Environmental
Social
Governance

No umbrella dashboard that shows the end user of leather all the sustainability sensitivities in the value chain

Leather sustainability standards have not been agreed (by consultation)

Environmental Module

1. Permits & Licenses
2. Environmental Management System
3. Environmental Health & Safety
4. Environmental Footprint
5. Land Use
6. Water Use
7. Raw Materials & Chemicals
8. Machinery & Equipment
9. Air Emissions
10. Effluent Treatment
11. Soil Contamination
12. Solid Waste

12 sections covering:

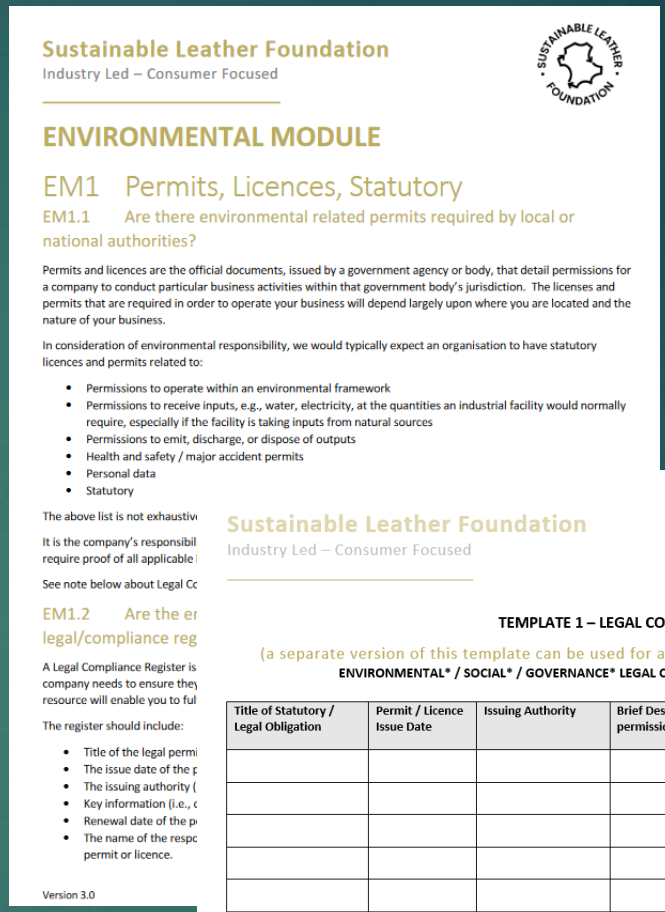
Permits, policies and systems

Environmental Inputs

Environmental Outputs

EM1. Permits and Licenses

- **The SLF Audit Standard examines the operating permits of all three ESG pillars**
- **The environmental inputs/outputs must show compliance with statutory requirements**



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ENVIRONMENTAL MODULE

EM1 Permits, Licences, Statutory

EM1.1 Are there environmental related permits required by local or national authorities?

Permits and licences are the official documents, issued by a government agency or body, that detail permissions for a company to conduct particular business activities within that government body's jurisdiction. The licenses and permits that are required in order to operate your business will depend largely upon where you are located and the nature of your business.

In consideration of environmental responsibility, we would typically expect an organisation to have statutory licences and permits related to:

- Permissions to operate within an environmental framework
- Permissions to receive inputs, e.g., water, electricity, at the quantities an industrial facility would normally require, especially if the facility is taking inputs from natural sources
- Permissions to emit, discharge, or dispose of outputs
- Health and safety / major accident permits
- Personal data
- Statutory

The above list is not exhaustiv

It is the company's responsibil require proof of all applicable

See note below about Legal Co

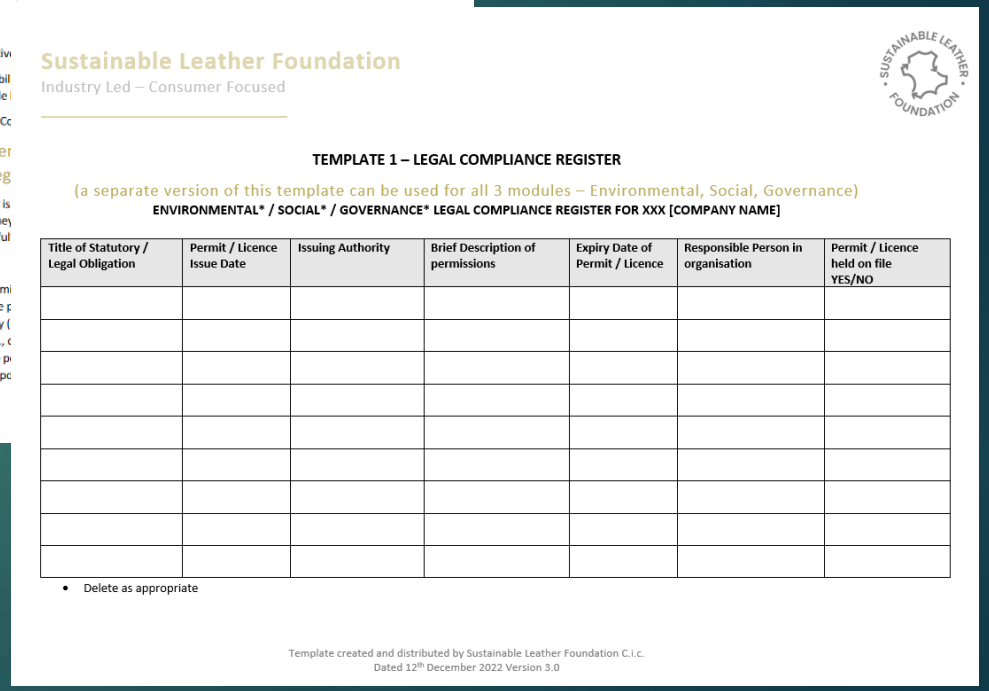
EM1.2 Are the er legal/compliance reg

A Legal Compliance Register is company needs to ensure they resource will enable you to ful

The register should include:

- Title of the legal permi
- The issue date of the p
- The issuing authority (
- Key information (i.e., c
- Renewal date of the pe
- The name of the respo permit or licence.

Version 3.0



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TEMPLATE 1 – LEGAL COMPLIANCE REGISTER

(a separate version of this template can be used for all 3 modules – Environmental, Social, Governance)

ENVIRONMENTAL* / SOCIAL* / GOVERNANCE* LEGAL COMPLIANCE REGISTER FOR XXX [COMPANY NAME]

Title of Statutory / Legal Obligation	Permit / Licence Issue Date	Issuing Authority	Brief Description of permissions	Expiry Date of Permit / Licence	Responsible Person in organisation	Permit / Licence held on file YES/NO

- Delete as appropriate

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Dated 12th December 2022 Version 3.0

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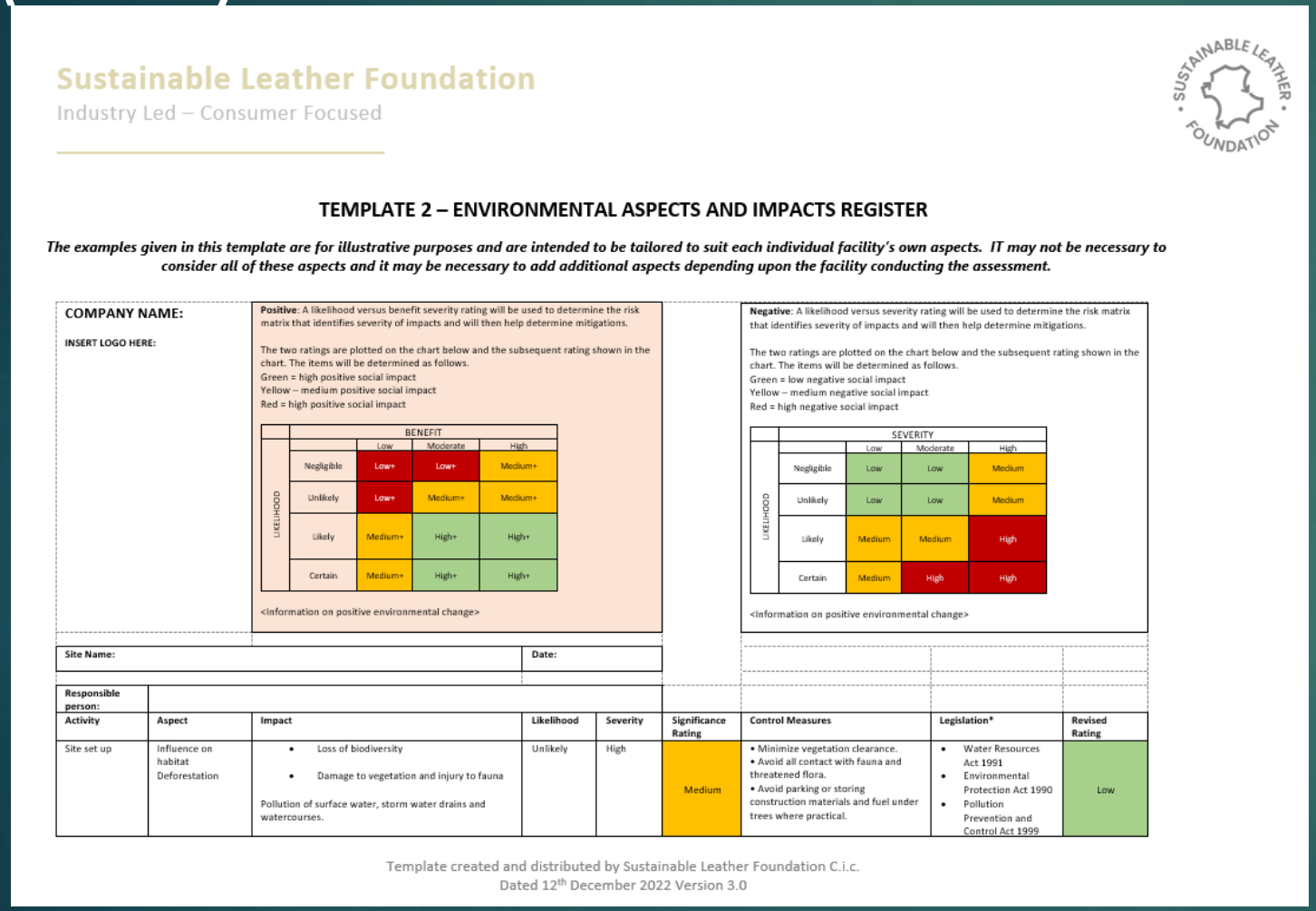
EM2. Environmental Management System (EMS)



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TEMPLATE 2 – ENVIRONMENTAL ASPECTS AND IMPACTS REGISTER

The examples given in this template are for illustrative purposes and are intended to be tailored to suit each individual facility's own aspects. IT may not be necessary to consider all of these aspects and it may be necessary to add additional aspects depending upon the facility conducting the assessment.

COMPANY NAME:

INSERT LOGO HERE:

Positive: A likelihood versus benefit severity rating will be used to determine the risk matrix that identifies severity of impacts and will then help determine mitigations.

The two ratings are plotted on the chart below and the subsequent rating shown in the chart. The items will be determined as follows.
Green = high positive social impact
Yellow – medium positive social impact
Red = high positive social impact

LIKELIHOOD	BENEFIT: Low	Moderate	High
Negligible	Low+	Low+	Medium+
Unlikely	Low+	Medium+	Medium+
Likely	Medium+	High+	High+
Certain	Medium+	High+	High+

<Information on positive environmental change>

Negative: A likelihood versus severity rating will be used to determine the risk matrix that identifies severity of impacts and will then help determine mitigations.

The two ratings are plotted on the chart below and the subsequent rating shown in the chart. The items will be determined as follows.
Green = low negative social impact
Yellow – medium negative social impact
Red = high negative social impact

LIKELIHOOD	SEVERITY: Low	Moderate	High
Negligible	Low	Low	Medium
Unlikely	Low	Low	Medium
Likely	Medium	Medium	High
Certain	Medium	High	High

<Information on positive environmental change>

Site Name:		Date:						
Responsible person:								
Activity	**Aspect**	**Impact**	**Likelihood**	**Severity**	**Significance Rating**	**Control Measures**	**Legislation***	**Revised Rating**
Site set up	Influence on habitat Deforestation	• Loss of biodiversity • Damage to vegetation and injury to fauna Pollution of surface water, storm water drains and watercourses.	Unlikely	High	Medium	• Minimize vegetation clearance. • Avoid all contact with fauna and threatened flora. • Avoid parking or storing construction materials and fuel under trees where practical.	• Water Resources Act 1991 • Environmental Protection Act 1990 • Pollution Prevention and Control Act 1999	Low

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- **A register of how a facility interacts with the environmental, social, business communities is analysed – aspects**
- **The aspects are then evaluated to see if they positively or negatively impact those communities**
- **Also known as a risk assessment**

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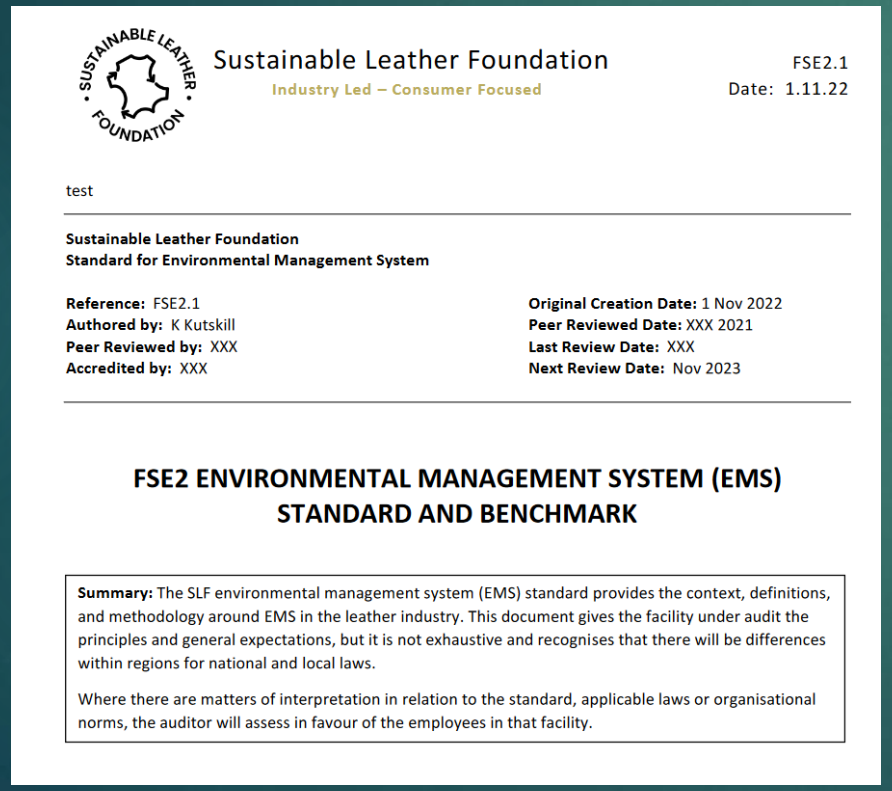
EM2. Systems and Analysis

The information obtained from an environmental impacts and aspects register is translated into a environmental management system:



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FSE2.1
Date: 1.11.22

test

Sustainable Leather Foundation
Standard for Environmental Management System

Reference: FSE2.1
Authored by: K Kutskill
Peer Reviewed by: XXX
Accredited by: XXX

Original Creation Date: 1 Nov 2022
Peer Reviewed Date: XXX 2021
Last Review Date: XXX
Next Review Date: Nov 2023

FSE2 ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) STANDARD AND BENCHMARK

Summary: The SLF environmental management system (EMS) standard provides the context, definitions, and methodology around EMS in the leather industry. This document gives the facility under audit the principles and general expectations, but it is not exhaustive and recognises that there will be differences within regions for national and local laws.

Where there are matters of interpretation in relation to the standard, applicable laws or organisational norms, the auditor will assess in favour of the employees in that facility.

- Scope
- Policy
- Objectives
- Procedures to meet those Objectives
- Footprint (Life Cycle Analysis and Mass Balance)
- Monitoring
- Review
- Continuous Improvement

EM2. PDCA Model

Plan	Do	Check	Act
• Establish environmental objectives and processes necessary to deliver results in line with the Aspects and Impacts (risk assessment)	• Implement the processes outlined in the plan • Allocate adequate resources and manpower	• Monitor and measure the results of the processes against the plan • Include commitments, objectives, operating criteria • Report the results	• Take action according to the results in order to continually improve • Re-evaluate the plan and continue the cycle

EM3. Environmental - Health & Safety

- **All three pillars must be concerned about H&S**
  - **Environmental (external) protection**
  - **Worker (personal) protection**
  - **Governance system and infrastructure**
- **Management system**
- **ISO 45001 or OSHA 18001**

- Noise Levels
- Odour Controls
- Pollution to waterways
- Air Pollution
- Hydrogen Sulphide Gas

Exercise

What do you consider to be the priority environmental risks in your facility?

What do you consider to be:

1. *the easy to implement changes that could have immediate benefits?*
2. *the medium term changes that require a little time to implement?*
3. *the long term changes that require strategic planning?*

EM4 Environmental Footprint

What is an LCA and a Carbon Footprint

LCA is defined by the ISO 14040 as:
the compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle.

A carbon footprint is **the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions.**

It is important to note that carbon footprint is only one of many aspects to consider in a lifecycle analysis

EM4 Environmental Footprint

3 Scopes of Carbon Emissions

What do the different emissions scopes mean?

Scope 1 emissions – direct emissions from sources owned or controlled by a company.

Scope 2 emissions – indirect emissions from purchased electricity, steam, heat, and cooling.

Scope 3 emissions – all other emissions associated with a company's activities.

EM4 Environmental Footprint

Key Components of a Lifecycle Analysis

There are six major components to understand prior to initiating an LCA:

- 1. Scope of Environmental Footprint / LCA
- 2. Functional Unit
- 3. System Boundary
- 4. Allocation
- 5. Life Cycle Inventory
- 6. Life Cycle Impact Assessment

Each of these components are critical to researching, prior to collection of data or hiring of a third party. While there are many more variables to consider when evaluating an LCA, understanding these six will provide a solid baseline for beginners.

EM4 Environmental Footprint

Where to start?

Before committing to a significant financial investment – LCAs can run to tens of thousands of pounds – start with basic knowledge and understanding.

1. Allocate internal resource – someone to take responsibility for researching the subject inhouse.
2. Study the existing ISO standards for Life Cycle Analysis (ISO14040 and 14044)
3. Consider one principal product line to focus on to start more in-depth analysis
4. Start collecting all the facility data associated with that product. Even if the scope, system boundaries, etc, are not finalised, all the data collected and organised for energy use, water use, chemical use, waste management and air emissions will be an excellent place to startCollect your data

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EM5. Environmental Input: Land Use

- Do you record and can you verify your land and its boundaries?
  - Deforestation
  - Displacement of indigenous people
  - Green v developed areas
  - Drainage, soil contamination

EM6. Environmental Input: Energy Consumption

EM6. Energy Consumption Table				
Month	Electricity Consumption	Natural Gas Consumption	Diesel Consumption	Total Production Output
Annual Total				
Unit				m^2 leather

Please reference the SLF environmental metrics calc-conv excel for tables with calculations and conversions available.

- Do you measure and record energy input and consumption?
- Do you utilise renewal energy sources?
- Do you look for efficiencies in consumption?

EM6. Environmental Input: Energy Consumption

Annex A

	kWh/kg	MJ/kg
Buffing dust (chrome)	4.69	16.9
Butane	12.58	45.3
Charcoal	8.22	29.6
Coke	7.22	26
Crude oil	11.67	42
Diesel	11.67	42
Ethane	13.28	47.8
Fleshings (dried)	2.47	8.9
Hard black coal (Australia and Canada)	6.64	23.9
Hard black coal (IEA)	6.94	25
Hydrogen (H_2)	33.30	120
Kerosene	11.94	43
Landfill gas (biogas)	17.70	63.72
Leather trimmings	5.47	19.7
Lignite/brown coal (Australia)	4.83	17.4
Lignite/brown coal (IEA)	2.78	10
Liquefied petroleum gas (LPG)	12.78	46
Methane (CH_4)	13.90	50
Methanol (CH_3OH)	6.31	22.7
Natural gas (methane and higher alkanes)	11.67	42
Pentane	12.60	45.36
Peat	4.72	17
Petroleum coke	8.69	31.3
Propane	12.88	46.4
Petrol/Gasoline	12.22	44
Rendered oil (methyl ester)	10.50	37.8
Shaving dust (chrome)	1.83	6.6
Soft bituminous coal (Australia and Canada)	4.83	17.4
Soft bituminous coal (IEA)	5.00	18
Steam	0.63	2.3
Sub-bituminous coal	6.78	24.4
Tannery mixed waste	3.33	12.0
Wood (dry)	4.44	16

Engineering ToolBox, (2003). *Fuels - Higher and Lower Calorific Values*. [online] Available at: https://www.engineeringtoolbox.com/fuels-higher-calorific-values-d_169.html [Accessed 12/11/2020].

3. Terms and definitions

3.1 **Btu – British Thermal Unit**

3.2 **Calorie (Cal)** - the energy needed to raise the temperature of 1 gram of water through 1 °C (now usually defined as 4.1868 joules)

3.3 **Joule** – the SI unit of work or energy, equal to the work done by a force of one newton when its point of application moves one metre in the direction of action of the force, equivalent to one 3600th of a watt-hour.

3.4 **Tce** – tonne of coal equivalent

3.5 **Toe** – tonne of oil equivalent

3.6 **Watt hour (Wh) -** the SLF will use the Wh hours unit of measurement as the standard unit of measurement (as is also used by the International Energy Agency, IEA), with the kilowatt hour, with the megawatt hour and gigawatt hour when necessary.

3.7 **Renewable energy** - sources of energy (wind power, solar power, hydroelectric power, ocean energy, geothermal energy, biomass, and biofuels) are alternatives to fossil fuels that contribute to reducing greenhouse gas emissions, diversifying energy supply, and reducing dependence on unreliable and volatile fossil fuel markets, in particular oil and gas.

[1] https://www.iso.org/standard/51297.html

[2] https://www.legislation.gov.uk/eudr/2009/28/contents#

Standard and Benchmark for guidance

EM7. Environmental Input: Water Use

EM7. Water Consumption Table		
Month	Water Consumption	Total Production Output
Annual Total		
Unit		m^2 leather

Please reference the SLF environmental metrics calc-conv excel for tables with calculations and conversions available.

- Do you measure and record water input and use?
- Do you recycle or use minimisation techniques?
- Do you perform a mass balance?

EM7. Environmental Input: Water Use

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FSE7.1
Date: 1.11.21

Annex A

Unit	Conversion
1 Gigalitre (GL)	1.0×10^9 L
1 Megalitre (ML)	1.0×10^6 L
1 Kilolitre (kL)	1.0×10^3 L
1 L	1 dm^3
1000 L	1 m^3

Standard and Benchmark for guidance

6. Calculation of water use

Parameter	Use (ML)
Supplied and metered water (municipal or other provider)	
Metered blue water (river, lake, reservoir, desalination)	
Metered ground extraction	
Tankered water (transported water)	
SUBTOTAL	
Less renewable green water (precipitation, recovery)	
SUBTOTAL	
Total annual amount of leather produced	
Facility energy consumption per square meter of leather produced (L/m^2):	

EM8. Environmental Input: Raw Materials and Chemicals

Control the flow, quantity, and turnover of incoming materials to the facility, reducing waste and ensuring safe and proper use

Monitor the designation and movement of incoming materials to ensure appropriate stock and on-time-delivery is maintained

Track usage over-time to identify critical products (and associated characteristics) requiring surrogate or back-up materials

Allow for trend analyses to be completed for evaluation of annual budget, waste minimisation and product development strategy

- Do you monitor and record input material?
  - Inventory
  - System control
  - Minimisation

EM9. Environmental Input: Equipment & Machinery

- Level of thermal insulation
- Condition of electrical wiring
- Energy use – energy saving lighting, auto switches
- Boiler efficiency
- Energy recovery / co-generation

- Do you implement energy efficiency audits on equipment and machinery?
- Is there a plan for maintenance and renewal?

Break

20 minutes

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Agenda Day 1

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17.00 pm	*End Day 1*

“let’s be the change that secures the future”

Session 2, Part 2: Environmental Module

EM10. Environmental Output: Air Pollution

- Do you monitor and record air outputs (with emissions) as an inventory?
- Do you practice any minimisation or reclamation?

EM10: Air Emissions Table						
Air Emission Source*	**Particulates** (ppm, ppb, or mg/Nm^3 where appropriate) Reference FSE10.1 for Benchmarks					
	Oxides of Sulfur (SO_x)	**Carbon Dioxide (CO_2)**	**Carbon Monoxide (CO)**	**Nitric Oxide (NO)**	**Oxides of Nitrogen (NO_x)**	**Oxygen (O_2)**
Regulatory Limit						
Air Emission Source 1						
Air Emission Source 2						
Air Emission Source 3						
Air Emission Source 4						
Air Emission Source 5						
Name of Regulation Referenced						

**Please define the air emissions source* (Generator, Boiler, Stack, etc). *If greater than 5 air emission sources, please add rows or reference the SLF environmental metrics calc-conv excel for expanded charts.*

EM10. Environmental Output: Air Pollution

- Baseline – meeting and legislative requirements
- Banding for additional good practice

Table 1. Air emission benchmarks for facilities.

CAS #	Substance	Limit			
		A	B	C	D
Low short term exposure limit (STEL) gases					
7783-06-4	Hydrogen sulfide	10 ppm	20 ppm	90 ppm* 2 ppm/hr by badge	NM = Failure
7664-41-7	Ammonia	10 ppm	25 ppm	300 ppm*	NM = failure
10049-04-4	Chlorine dioxide	0.1 ppm	0.3 ppm	5 ppm*	NM = failure
75-09-2	Dichloromethane	25 ppm	125 ppm	2300 ppm*	NM = failure
Higher short term exposure limit (STEL) gases/particles					
-	PM_{10}	20 mg/Nm³	50 mg/Nm³	500 mg/Nm³	NM
-	$PM_{2.5}$	10 mg/Nm³	25 mg/Nm³	250 mg/Nm³	NM
-	NOx	40 mg/Nm³	150 mg/Nm³	450 mg/Nm³	NM
-	SOx	100 mg/Nm³	300 mg/Nm³	400 mg/Nm³	NM
-	Total Volatile Organic Compounds (by meter)	0.3 mg/Nm³	0.5 mg/Nm³	10 mg/Nm³	NM
71-42-2	Benzene	100 ppb	0.5 ppm	2 ppm	NM
111-96-6	Bis(2-methoxyethylether)	1 ppm	5 ppm	10 ppm	NM
108-39-4	m-cresol	10 mg/Nm³	20 mg/Nm³	50 mg/Nm³	NM
95-48-7	o-cresol	10 mg/Nm³	20 mg/Nm³	50 mg/Nm³	NM
106-44-5	p-cresol	10 mg/Nm³	20 mg/Nm³	50 mg/Nm³	NM
95-50-1	1,2-dichlorobenzene (1,2-DCB)	10 ppm	20 ppm	50 ppm	NM
107-06-2	1,2-dichloroethane	2 ppm	10 ppm	30 ppm	NM
110-80-5	2-ethoxyethanol	0.5 ppm	2 ppm	5 ppm	NM
111-80-5	2-ethoxyethyl acetate	0.5 ppm	2 ppm	5 ppm	NM
110-71-4	Ethylene glycol dimethyl ether	1 ppm	5 ppm	10 ppm	NM
109-86-4	2-methoxyethanol	10 ppb	0.1 ppm	2 ppm	NM
110-49-6	2-methoxyethylacetate	10 ppb	0.1 ppm	2 ppm	NM
75-09-2	Methylene chloride	20 ppm	50 ppm	100 ppm	NM
-	Polychlorinated dibenzodioxins (PCDD)	0.05 pg/m³	0.1 pg/m³	0.4 pg/m³	NM
-	Polychlorinated dibenzofurans (PCDF)	0.05 pg/m³	0.1 pg/m³	0.4 pg/m³	NM
79-01-6	Trichloroethylene	1 ppm	10 ppm	30 ppm	NM
112-49-2	Triethylene glycol dimethyl ether	1 ppm	5 ppm	10 ppm	NM
127-18-4	Tetrachloroethylene	10 ppm	20 ppm	50 ppm	NM
1330-20-7	Xylene	20 ppm	50 ppm	100 ppm	NM

* Levels equal to or higher; NM = not measured yet

EM11. Environmental Output: Effluent

EM11: Effluent Outputs Table												
Production Effluent Emissions Source*	Particulates (ppm) Reference FSE11.1 for Benchmarks; Pg. 5											
	Acidity (pH)	Temp (C°)	COD	TKN	NH_3-N	Total Cr	Total Cr VI	S^{2-}	Oil and Grease	Susp. Solids	Total Diss. Solids	Colour (ADMI)
Regulatory Limit												
Effluent Source 1												
Effluent Source 2												
Effluent Source 3												
Effluent Source 4												
Effluent Source 5												
Name of Regulation Referenced												

**Please define if CETP, METP, or own ETP. If greater than 5 effluent sources, please add rows or reference the SLF environmental metrics calc-conv excel for expanded charts.*

COD = Chemical Oxygen Demand; TKN = Total Nitrogen; NH_3-N = Ammoniacal Nitrogen; Cr = Chromium; Cr VI = Chromium VI; S^{2-} = Sulfide; Susp. = Suspended; Diss. = Dissolved

- Do you monitor and record your production related output water?
- Do you test your output parameters?

EM11. Environmental Output: Effluent

Table 1. Water emission benchmarks for facilities (adapted from Buljan and Král, 2019).

Substance	Limit			
pH	5-9			
Temperature	No more than 15°C above the receiving water temperature			
	A	B	C	D
Chemical Oxygen Demand, COD (ppm)	40	300	500	NM
Total Nitrogen, TKN (ppm)	5	50	100	NM
Ammoniacal Nitrogen, NH_3-N (ppm)	0.5	30	50	NM
Total Chromium (ppm) - Chromium VI (ppm)	0.05 0.001	1.2 0.01	2 0.02	NM NM
Sulfide, S^{2-} (ppm)	0.1	3	5	NM
Oil and Grease (ppm)	0.5	50	100	NM
Suspended Solids (ppm)	5	50	100	NM
Total Dissolved Solids (ppm)	500	1000	2000	NM
Colour (ADMI)	50	175	300	NM

NM = not measured yet

- Baseline – meeting and legislative requirements
- Banding for additional good practice

EM12. Environmental Output: Soil Contamination

- Do you monitor and record outputs to the soil?
  - Chemical and other pollutant spills
  - Chrome shavings
  - Contaminated waste

- Do you have storage with bunded flooring and run off drainage channels?

EM13. Environmental Output: Solid Waste

- Do you monitor and record solid waste outputs?
  - Safe storage
  - External collectors that are regulated / verified

- Do you have tests / checks for sludge content?

- Do you a reduce / re-use / recycling policy?

Open discussion

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