Dr. Norbert Schmitz
Managing Director,
4C Services

Update on Sustainability Challenges and 4C Solutions
Sustainability Challenges and 4C Solutions

Dr Norbert Schmitz, Managing Director, 4C Services GmbH
4C Regional Stakeholder Conference – 4 December 2023, Ho Chi Minh City, Vietnam
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Overview of 4C in the world and in Vietnam

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Innovative Solutions for Sustainability

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New Regulatory Challenges of the EUDR
01 Overview of 4C in the world and in Vietnam
4C offers solutions for key sustainability challenges

- no child labor and ensured protection of children's rights
- fair and safe working conditions
- conservation of soil and water resources
- smallholder capacity building and technical assistance
- promotion of gender equality
- increased farm profitability and productivity
- implementation of good agricultural practices
- no deforestation and ensured protection of biodiversity
- climate change mitigation and adaptation
- impact on surrounding communities
- enhanced transparency through traceability
- Due Diligence requirements
- existence of food security
- use of renewable energy
We certify coffee supply chains and create solutions...

to protect nature and preserve resources, ...
to guarantee human and labour rights, ...
... and to ensure sustainable and economically viable livelihoods.
4C is a pathway to sustainable coffee supply chains

- 4C coffee produced in 18 countries
- More than 300,000 farmers are producing 4C coffee
- 26 cooperating certification bodies
- 1.7 million tons of green coffee certified
- Nearly 850,000 hectares covered
- Independent 3rd party audits
- Innovative and cost-efficient solutions
- Major brand owners and traders are sourcing 4C coffee
- Use remote sensing to verify land use change
- Effective Improvement Plans for impact on the ground

*data as of 15th February, 2023*
4C supply base spreads across 18 different countries:

- Mexico
- Nicaragua
- Guatemala
- Honduras
- Peru
- Colombia
- Brazil
- Ivory Coast
- Uganda
- India
- China
- Vietnam
- Thailand
- Indonesia
- Philippines
- Papua New Guinea
- Burundi
- Tanzania

Top 7 countries producing 4C certified coffee:

As of 15th February, 2023
4C Certification in Vietnam*

- **Area (hectares):** 165,199.64
- **Estimated Production (mT):** 601,351.09
- **BP Producers:** 93,726
- **4C Units:** 83

Relative growth:
- 2021 – 2022
  - Area: + 6.31%
  - Estimated Production: + 3.46%
  - BP Producers: + 5.13%
  - 4C Units: + 5%

*year of reference: 2022
4C is a comprehensive and reliable certification system

4C applies strict criteria based on the three dimensions of sustainability

- **Economic Dimension**
- **Social Dimension**
- **Environmental Dimension**

Central pillar of the 4C system:
Continuous improvement on farms through mandatory Improvement Plans.

International Trade Centre – Sustainability Map


4C is actively working with sustainability initiatives and associations
4C is an independent system but part of a group of organizations providing expertise on sustainability.

The world’s leading certification system for sustainability and greenhouse gas emissions.

Independent management consultancy with a focus on sustainability and climate protection.

Risk assessment and verification of sustainable and deforestation-free supply chains based on remote sensing and AI-based algorithms for image interpretation.

Globally leading certification system for coffee.
4C values a Multi-Stakeholder Approach

The 4C Code of Conduct was developed in a participatory and transparent process with various stakeholders

4C Advisory Board

Stakeholder Representation

- Coffee producers and processors
- Traders and industry
- NGOs, social sector, science and research

Current members: Marcelo Burity (Nestlé), Andreas Feige (Meo Carbon Solutions), Dr. Jan Michael Henke (Meo Carbon Solutions), Michael von Luehrte (MVL coffee), Nhung Ngoc Ly (ComCo Trading), Dr. Jennifer Wiegel (The Alliance of Biodiversity International and CIAT), José Sette (ex ICO), Dr. Rafaël Schneider (Welthungerhilfe)

4C Events - Online and Offline Dialogue with Stakeholders

- Stakeholder Conferences
- Trainings
- Seminars & Workshops

Upcoming in 2023 and 2024:

- 4C Code of Conduct and Add-On Trainings
- Certification Body Feedback Meeting
- 4C Sustainable Coffee Days Series
- Regional Stakeholder Conferences in Vietnam and Honduras

Consulting & Advising

4C Services Operations
4C is the 3rd Party certification with the largest production volumes globally

As according to the GCP Sustainable Coffee Purchases Snapshot 2022

<table>
<thead>
<tr>
<th>SUSTAINABILITY SCHEME</th>
<th>MARKET UPTAKE/GLOBAL SALES (MT)</th>
<th>ESTIMATED PRODUCTION (MT)</th>
<th>AREA (HA)</th>
<th>FARMERS</th>
<th>WORKERS (SEASONAL &amp; PERMANENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4C 2022</td>
<td>763,121</td>
<td>1,696,519</td>
<td>81,900</td>
<td>307,590 (producers)</td>
<td>864,957</td>
</tr>
<tr>
<td>Fairtrade International 2021</td>
<td>226,328</td>
<td>923,464</td>
<td>153,327</td>
<td>872,916 smallholders*</td>
<td>N/A</td>
</tr>
<tr>
<td>Rainforest Alliance / UTZ 2022</td>
<td>943,400</td>
<td>1,561,900</td>
<td>613,659</td>
<td>491,296</td>
<td>1,074,355</td>
</tr>
</tbody>
</table>

BASLINE COFFEE CODE EQUIVALENT 3rd PARTY
Benefits of 3\textsuperscript{rd} Party Certification Systems like 4C

Independent third-party audits ensure the credibility, transparency and reliability of sustainability certifications.

Auditors are intensively trained by 4C to ensure consistent audit quality.

Cooperating Certification Bodies are accredited according to ISO 17065 and operate according to ISEAL and SAI Silver Level Assurance Guidance.

Integrity Program ensures high level of credibility.
Leading brand owners trust 4C certified coffee ...
... and use the 4C logo on packaging or in their sustainability communication.

Possibility of using the carbon footprint and gender equality certificate logo on the packaging.
**Stakeholder testimonials about 4C**

“We will continue to promote the realization of **sustainability** in the **production and distribution of coffee** beans through the procurement of the coffee beans cultivated on coffee farms conformable to the **4C certification system**.” – Hideki Takeuchi, Corporate Executive Deputy President, Ajinomoto AGF, Inc.

“Over the past few years, **there have been great improvements and developments of the 4C program**, using new learnings and technologies to make it even more robust and relevant for the entire coffee sector.” – Marcelo Burity, Head of Green Coffee Development, Nestlé (UK)

“4C Services, its standard, and particularly its **engagement for sustainable structures and processes on the ground** is a relevant factor for Melitta as well as for the **coffee sector as a whole**.” – Stefan Dierks, Director Sustainability Strategy, Melitta Group

“Since joining 4C, SIMEXCO has **seen positive impacts on farmers’ lives** with regards to **economic, social, and environmental** aspects.” – Simexco Dak Lak Ltd, Vietnam
Innovative Solutions for Sustainability
Innovative approaches and solutions for sustainable coffee supply chains

Innovative risk assessment processes supported by remote sensing

Reliable audits guaranteed by regular training and an integrity program

Traceability from farm to roaster through the 4C Portal

Additional certifications to address specific challenges in the coffee sector

Food Security Add-On

Carbon Footprint Add-On

Gender Equality Add-On

GRAS logo
Traceability along the 4C certified coffee supply chain

Example of a common supply chain in Latin America. There are other possibilities, for example wet milling is not mainly applied to Robusta coffee in Vietnam.
Innovative risk assessment procedures support the implementation of deforestation free and ...  

- Satellite images and vegetation index time series to determine the exact time and type of land use change activities within plantation outlines.
- This allows to verify the compliance with 4C criteria.

Example

Deforestation in 2012

Natural forest

Plantation
Social indices are also included into the GRAS Tool

- Global Hunger Index (GHI)
- World Governance Indicators (WGI)
- Human Development Index (HDI)
- Global Slavery Index (GSI)
- EPI Agricultural Subsidies (EPI AS)
- EPI Pesticide Regulation (EPI PR)
- EPI Water Resources (EPI WR)
- UNICEF Access to Drinking Water (UNICEF WA)
- UNICEF Access to Sanitation (UNICEF WS)

Additionally, the ratification of UN International Labor Organisation (ILO) Core Labor Standards is displayed within the maps.

E.g. the Global Hunger Index is an indication for food security, which is a major issue in rural populations and farmers.
4C Add-Ons to address specific challenges in the coffee supply chain

- These Add-Ons are voluntary modules that are applied **on top of the core 4C certification** requirements and procedures.
First 4C Carbon Footprint Add-On Certificates

- **Vietnam**
  - Issued to Vinh Hiep Ltd. Co. in January 2023
  - Vinh Hiep now allowed to trade coffee as 4C Climate Friendly certified with a verified GHG emission value

- **Tanzania**
  - First 4C Climate Friendly Coffee Certificate
  - Issued to KDCU in Tanzania by Africert on 23 November 2022
  - 4C Team provided guidance during the pilot audit
  - KDCU is now allowed to trade coffee as 4C Climate Friendly certified with a verified GHG emission value
First 4C Gender Equality Add-On Certificates

First GE certificates published already:
- Sucden Colombia
- FNC Colombia

Vietnam
- Two pilot units
  - Mercafe
  - Simexco

Colombia
4C implements projects to address specific sustainability challenges

Increased impact on the ground & project learnings for the 4C certification system

- Improving working and living conditions for coffee smallholders
- Calculating and reducing carbon footprint of coffee
- Improvement of biodiversity on coffee plantations
- Assessing gender equality gaps and empowering women in coffee
- Enhancing soil health and climate resilience of coffee farms
4C Projects in Vietnam

Reducing coffee greenhouse gas emissions in Vietnam
• In 2020, 4C initiated a pilot project to calculate GHG emissions in coffee production.

Improving biodiversity in coffee landscapes in Vietnam
• 4C and its partner initiated a joint project to improve biodiversity in coffee landscapes in Vietnam.

Establishing Carbon Footprint Baselines for Robusta Coffee Production in two key sourcing regions: Central Highlands, Vietnam and Southern Sumatra, Indonesia
• 4C joined this project in 2023 as a technical partner.

Farmer Phan Đình Tú, Gia Lai, Vietnam:
“By actively producing micro-organic fertilizers my family has saved 10 million VND from not buying chemical fertilizers. And our health and the biodiversity is protected.”
Regenerative Agriculture Practices

1. Maintain continuous vegetation cover on the ground as much as possible.

2. Reduce soil disturbance to promote the stabilisation of organic matter.

3. Increase quantity and diversity of organic waste returned to the soil.

4. Maximising the efficiency of nutrient absorption by plants and water use.

5. Restoration of microbial life essential for soil health and biodiversity.
Increasing soil health on coffee farms

Insetting of carbon emissions within your own supply chain with 4C and Meo

Impacts include:

- restored soils and increased coffee production,
- decreased risk of coffee-driven deforestation via improved resilience of coffee trees,
- reduced use of cultivation inputs – lower GHG emissions footprint and higher profitability
- increased level of biodiversity in healthier soils.

Project focuses on increasing soil fertility and soil organic carbon through reducing soil acidity and resulting surge of microbial activity in the healthier soils.
Facing the challenges and reaping the benefits of carbon farming with 4C

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Challenges</th>
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<tbody>
<tr>
<td>Increased carbon removal</td>
<td>Quality standards</td>
</tr>
<tr>
<td>Additional income for producers</td>
<td>Digital terrestrial monitoring</td>
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<tr>
<td>Higher biodiversity</td>
<td>Cost-effective monitoring</td>
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<tr>
<td>Increasing the climate resilience of agricultural and forest land</td>
<td>Consultancy services</td>
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<tr>
<td></td>
<td>Financing</td>
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<tr>
<td></td>
<td>• Public funding (CAP, State aid, EU funds)</td>
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<tr>
<td></td>
<td>• Food and biomass value chain</td>
</tr>
<tr>
<td></td>
<td>• Carbon credits outside value chain</td>
</tr>
</tbody>
</table>

*EU DG CLIMA*
03 New Regulatory Challenges of the EUDR
The new regulation aims to minimize the EU's contribution to deforestation and greenhouse gas emissions.

Relevant commodities and relevant products shall not be placed or made available on the market or exported, unless all the following conditions are fulfilled:

a) they are deforestation-free;

b) they have been produced in accordance with the relevant legislation of the country of production;

c) they are covered by a due diligence statement.
December 2022
EUDR was agreed upon in the Trialogue

29 June 2023
formally adopted by the EU Parliament and the EU Council

30 December 2024
EUDR is now fully applicable for operators not considered SME

June 2025
SME are now also fully in charge to be EUDR complaint
The 4C Certification System offers a One-Stop-Solution for EUDR

- EUDR requirements (Art. 2 (40)) covered in the 4C Code of Conduct
- Traceability is provided through the Commercial Reporting via the 4C Portal by System Users
- Risk analysis tools by GRAS for external auditors verify potential conversion of primary forest and protected areas through remote sensing
- Geo-coordinates of more than 320,000 farmers in the 4C Portal
- 4C offers support options for the Legality Check

More details in the next presentation by 4C
Create a sustainable future with 4C!

Interested in...

- learning more about our solutions?
- 4C certified “EU Coffee”?
- contact us!

Sustainable. Traceable. Certified.

CONTACT

4C Services GmbH
Hohenzollernring 72
50672 Köln, Germany

www.4c-services.org

info@4c-services.org