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Corporate Standard for Sourcing of Bio-carbon (Wood and Charcoal)	R00	ECM-CCB-ST-085
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Corporate Standard for Sourcing of Bio-carbon (Wood and Charcoal)

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1 Purpose and Scope:

Elkem is committed to sustainable and ethical raw material sourcing in accordance with internationally accepted principles and standards. This standard applies for the sourcing of wood and charcoal as a carbon source (bio-carbon) for the production of Silicon alloys, and describes requirements for ethical and sustainable sourcing of bio-carbon.

2 Target Group:

All Elkem employees and Elkem suppliers producing, purchasing and/or working with sourcing of bio-carbon.

3 Definitions:

Bio-carbon: Used in this document as a collective term for non-fossil carbon sources (wood chips and charcoal) that may be used as a reduction agent in the production of silicon and ferrosilicon. Bio-carbon is a renewable source of fixed carbon and is defined as CO₂ neutral.

Sustainable Forest Management (SFM): The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic, and social functions, at local, national and global levels, and that does not cause damage to other ecosystems. (European forest Convention /UN-FAO)

Species under threat: Any species of wood listed by International Union for Conservation of Nature (IUCN) / Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) as threatened species.

Old-growth forest (also called primary forest or virgin forest):

Forest of exceptionally high conservation value due to its combination of very old trees, very large trees, ecologically valuable forest structure, large quantities of woody debris, and species composition representative of the specific ecosystem in which it is found.

Non-native trees: Species living outside its native distribution range which has arrived there by human activity, either deliberate or accidental.

Indigenous rights:

Rights belonging to the existing descendants of the peoples who inhabited the present territory of a country wholly or partially at a time when persons of a different culture or ethnic origin arrived there from other parts of the world (based on a definition used by the UN Working Group on Indigenous Peoples).

4 Responsibilities:

4.1 Corporate and divisional management

- Main responsibility for ensuring that bio-carbon sourcing is done in accordance with this standard and any national and/or international regulations that may give additional requirements.

4.2 Corporate and divisional procurement functions

- Establish and maintain a knowledge base on applicable national and international regulations that may apply for bio-carbon including wood sourcing, sustenance registration (REACH in Europe), production processes and any logistical issues through the value chain.
- Establish contractual requirements that ensure sustainable and ethical supply when signing contracts for bio-carbon and follow up compliance from all involved parties with these requirements.
- Audit the bio-carbon value chain routinely

5 Description

Elkem is committed to sustainable and ethical raw material sourcing in accordance with internationally accepted principles and standards. Ethical and sustainable bio-carbon sourcing is based on 3 main principles:

- Acceptable wood resources for the production of bio-carbon
- Acceptable working conditions and respect for basic human rights during the production and logistics process.
- Zero tolerance for corruption and legal non-compliance

5.1 Acceptable sources of wood

The following wood sources are defined as acceptable:

- Plantation wood from legally established and sustainably managed plantations
- Sustainably managed forests provided a number of requirements are fulfilled
- Naturally degraded forests or non-native trees that pose a threat to existing forest and/or agricultural areas provided that sustainable management is in place, and agreements with internationally recognized experts and local NGOs are in place
- Use of waste wood from other acceptable wood product production, or re-planting of plantations (rubber, coffee, etc.) provided all applicable permits and licenses are in place.

5.1.1 Sustainable management of wood sources

Sustainable management of all types of forests, including plantations, means that:

- All applicable permits have been received and are valid (registration in national registries, environmental permits, land use permits, transportation permits, production permits, export/import permits, etc.)
- The management is in accordance with national laws and regulations and the forests are managed based on the principles of international forest certifying bureaus (FSC and PEFC)
- A chain of custody has been established to ensure and document traceability
- Periodic audits by third party are done to verify compliance with national laws and regulations as well as principles for sustainable forest management.

5.1.2 Sources of wood defined as not acceptable

- Wood originating from old-growth and/or any other protected forest
- Any threatened species of wood listed by International Union for Conservation of Nature (IUCN) / Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

5.1.3 Indigenous rights

Possible indigenous rights must be clarified in connection with approval of wood sources. If indigenous rights are identified, permission must be obtained from representatives for these people and acceptable compensation given.

5.2 Acceptable working conditions and basic human rights

A complete overview of principles for worker’s rights and basic human rights can be found in Elkem’s CSR policy. As bio-carbon production can be labor intensive and normally located in remote areas with low population density the following topics need special attention:

- Worker registration (public registration for taxes, insurance and social security).
- Worker contracts including fair conditions, insurance and fair wages
- Child/slave labor
- Health and safety issues with special focus on personal protection (PPE), machine/equipment safety, fire prevention and emergency preparedness.

These issues need to be ensured throughout the whole value chain as contractors, sub-contractors and short-term employees are often involved in different parts of the process.

5.3 Zero tolerance for corruption and legal non-compliance

Complicated bureaucratic systems for permits and lack of governmental resources for compliance follow-up are typical in many areas with bio-carbon production, increasing the risk for illegal operations and corruption throughout the value chain. Areas that need special attention are:

- Transaction transparency with land purchases and contracts
- Obtaining and verifying legal permits and certificates
- Traceability of wood sources

Elkem has zero tolerance for corruption and legal non-compliance. Provisions to prevent this and follow up compliance throughout the value chain are to be included in all contracts for bio-carbon.

5.4 Cooperation with NGOs and local authorities

Contact with relevant and reputable NGOs can be very helpful when trying to understand ethical and sustainability issues in different countries. Contact must be kept at a professional level ensuring that NGO integrity is not compromised and that reports are viewed as objective and impartial.

Contact with local authorities must be transparent. Agreements must be documented in writing and any payments for services and/or permits officially accounted for.

6 Approval, Audits and Checklists

Potential suppliers of bio-carbon are to be approved based on principles in this document, Elkem’s CSR policy (ECM-ES-PO-003) and Elkem’s supplier approval standard (ECM-CCB-GU-075) before contracts are signed. Approved suppliers of bio-carbon, and their contractors / sub-contractors are to be audited routinely throughout the contract period.

Attachment 1 shows a typical checklist for CSR issues for charcoal production.

7 Revision history

R00	01.07.2016	First edition	Mark Breidenthal	Mark Breidenthal
Rev:	Date:	Description	Written by:	Approved by:

8 Attachment 1 Checklist for Charcoal in Paraguay

Documents requested
Legal-Commercial Issues
a. RUC: Unique Taxpayer Registration. Company Id
b. Evidence of RUC
c. Certificate of tax compliance.
d. Municipal business license
e. Municipal business license visible in the facilities
f. Client list
g. Exporter Certificate from MIC (commerce industry ministry)
h. Forest Exporter Register
i. Forest and trade Register
j. List of providers registered in the INFONA
Environmental Issues
Raw material Origin
a. Comes from forest plantations
b. The plantation is registered in the INFONA
c. The plantation has Environmental License
d. Raw material has their shuttle guide
e. Comes from native forests with Forest Management Plan approved by the INFONA
f. The forest is registered in the National Forest Registry
g. The forest under management has the Environmental license
h. The species used are not under threat.
Processing Plant
a. Registered in the INFONA's Forest Industry Registry
b. Environmental Impact Declaration (DIA)
c. Environmental Impact Assessment or similar
d. Environmental Management Plan
e. Meets the Environmental Management Plan
f. Fire Prevention System
Job Issues
a. Books of the Ministry of Labor – employee register
b. Sheets worker – employer contribution from IPS – social security - retirement
c. Human Resources Policy
d. Wage Policy
e. Administrative manuals
f. Personal safety equipment features according to activity performed
g. Security equipment for the workers is provided by the company