Nuts and bolts of
Carbon Footprint
Management certification

Introduction to this guide

This guide provides an overview of the basic principles of Carbon Footprint Management certification and the requirements set up in NEPCon's Carbon Footprint Management Standard. It is aimed at companies considering certification; however, others interested in learning how a carbon management system works in practice – NGOs, researchers, students – may also benefit from it.

If your organisation decides to pursue with CFM certification, we recommend that you also read our customer guide "Prepare for Carbon Footprint Management certification" and explore our free certification toolkit; including info sheets, service factsheets, CFM Commented Standard, CFM calculation sheets.

A free resource

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Please send any questions, comments, and suggestions for improvements of this guide to info@nepcon.net.

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1. What is Carbon Footprint Management certification?

Applicable for either corporate or product footprinting, Carbon Footprint Management certification (CFM) verifies an organisation's compliance with NEPCon's CFM Standard through regular, independent assessments.

Certification ensures that your efforts in measuring, reducing and offsetting carbon emissions are effective and technically sound and enables you to communicate your efforts with integrity and credibility.

By demonstrating that you manage your carbon emissions, you are providing your business partners and customers the opportunity to support climate responsible business practices. Typically, certified companies also experience sizable cost savings and enhanced brand value.

1.1. Who is certification for?

Certification is available for organisations of any size and sector.

However processors, manufacturers, traders, printing houses, paper merchants and construction companies may benefit the most by drawing on NEPCon's strong experience in delivering certification services within these industries.

2. Who does what within the CFM system

2.1. Who defines the certification requirements?

NEPCon defines the rules for certification through the development and maintenance of standards and policies. Additionally, NEPCon maintains a strict system for auditor qualification and system improvements, ensuring a transparency and consistent certification procedure.

The Carbon Footprint Management Standard is developed with strong input from stakeholders, following the ISEAL Code of Good Practice for Setting Social and Environmental Standards. NEPCon revises the Standard at least every three years, following best-practice and developments in corporate greenhouse gas accounting.

Learn more at www.nepcon.net/CFM-standard.

2.2. How are certificates issued?

To achieve certification, an organisation's compliance with the CFM Standard must be confirmed through an independent assessment conducted by NEPCon. NEPCon will then issue the CFM certificate. To maintain a certificate, an organisation will need to demonstrate continued compliance during regular assessments. Learn more about the certification process in *Section 6*.

2.3. Introducing NEPCon

NEPCon is an international, non-profit organisation that delivers sustainability services and engages in innovation projects. It does this to facilitate the transformation of business practices and consumer behaviour to promote the responsible use of natural resources. NEPCon offers tools and services designed to meet the needs of businesses that seek to reduce their carbon footprint.

Support and development

NEPCon

Maintains central functions such as management, development of standards & policies, communication, promotion of CFM brand, complaints & disputes handling.

Practical implementation of the system

NEPCon National Offices

Audits companies seeking CFM certification. Issue and withdraw certificates based on certificate holders' performance.

Certified organisations

Fulfil CFM requirements and undergo annual audits.
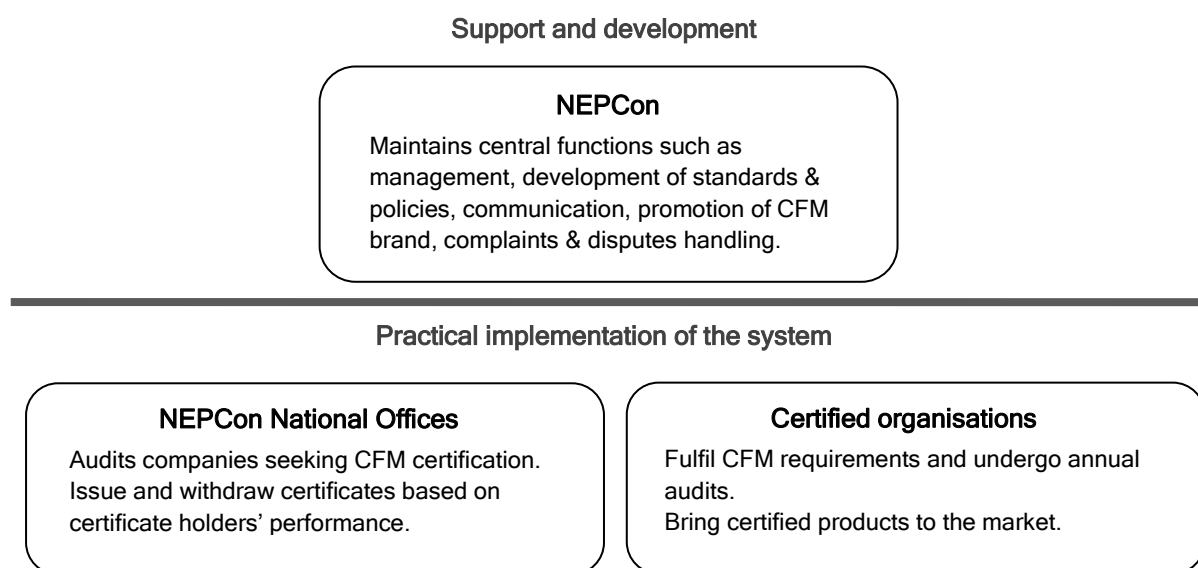Bring certified products to the market.

Figure 1: The CFM system – the main actors and their roles

3. Core requirements for CFM certification

As a CFM certified organisation, you are required to measure and reduce emissions resulting from all business activities of an organisation (for corporate carbon footprint) or from the lifecycle processes of a specific product (for product carbon footprint); or both.

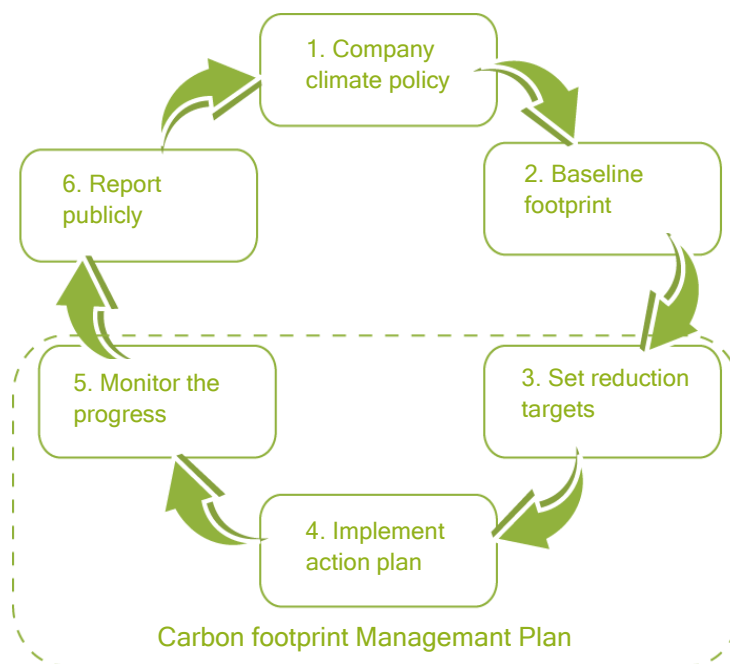You are required to systematically measure and reduce your carbon footprint over time.

Figure 2: Key steps to managing your carbon footprint

3.1.   CFM Standard

The CFM Standard sets out the key requirements for certified organisations. It prescribes the systems and procedures that you need in place to effectively measure, calculate and reduce your carbon footprint.

The requirements cover six core areas. You must:

1. Quality system

- have a corporate climate policy that describes your organisation's overall intentions to manage the carbon footprint
- have training procedures
- assign responsibility for implementing CFM system to one person and define responsibilities
- quality assurance and documentation

2. **Scope of footprint**

- define organisational boundaries
- choose a base year

3. **Calculate carbon footprint**

- choose calculation methods, data collection and emission factors
- allocate emissions to processes
- assess data quality

4. **Carbon footprint management plan**

- set reduction targets
- set offsetting targets (if applicable)
- define action plan to reduce emissions
- monitor and evaluate performance; the management plan may be revised yearly and targets can be adjusted

5. **Reporting and public information**

- make certification scope, calculation method and results publically available

6. **CFM claims**

- make accurate statements and claims
- use on-product and off-product labels

Meeting the requirements of the CFM Standard ensures that companies follow internationally recognised best-practices for greenhouse gas accounting. The CFM Standard builds upon core elements of the GHG Protocol standards developed by the World Resource Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), The ISO 14064-1 standard the PAS standards developed by the British Standard Institute (BSI) as well as climate elements of the EU Guidelines for 'Organisational and Product Environmental Footprinting'.

NEPCon's CFM standard is designed to provide a simple, consistent, rigorous and auditable tool for organisations seeking to bring down their carbon footprint and to secure a solid basis for communicating their carbon footprint management efforts.

3.2. NEPCon Green Charter

Engaging with NEPCon also requires you to comply with basic requirements of ethical conduct, as described in NEPCon's Green Charter. Among other aspects, your organisation must not be connected to unacceptable forestry, such as illegal logging.

4. Type and scope of certificate

Before engaging in certification, you will need to decide on the type of certificate. This will depend on your sustainability goals and the way you wish to communicate this to consumers, investors and the general public.

There are two types of certificates:

1. **Corporate carbon footprint:** Covers emissions from all activities across the whole organisation, such as energy and heating consumed used in office buildings and production facilities, fuel use in company vehicle, business travel and waste.

2. **Product carbon footprint:** Covers emissions from all activities during the life cycle of a product from "cradle to gate" or "cradle to grave".

If, for example, you wish to lower the operational costs of your organisation and emphasise your improved carbon performance to investors or government agencies, you should opt for corporate certification. If you wish to reduce the environmental impact of a specific product and communicate that to end consumers, product certification would be most appropriate.

Since there is overlap in data collection between corporate and product carbon footprinting, you may find added business value and efficiency in developing a corporate and product footprint in parallel.

5. Calculating you carbon footprint

A corporate or product carbon footprint is calculated though these main steps:

- Define your boundaries
- Identify your emissions
- Collect data in and outside of your organisation
- Chose calculation method

5.1. **Corporate** carbon **footprint**

You will need to calculate the carbon emissions resulting from all activities related to your business over a one year period.

This will give you an overview of the emission hotspots in your organisation, helping you to identify where to focus your reduction efforts. Carbon emissions represent a cost to your business and in many cases, reducing your emissions will result in operational cost savings.

To calculate your corporate carbon footprint, you will need to:

1. **Establish your organisational boundaries**, defined by all the processes over which you have economic or operational control.

2. **Identify your emissions**. Divide these into Scope 1, Scope 2 and Scope 3, depending on the where the emissions take place (*see illustration 1 below*). The CFM Standard sets out minimum requirements for emission sources that need to be included (*see CFM Standard Annex II*).
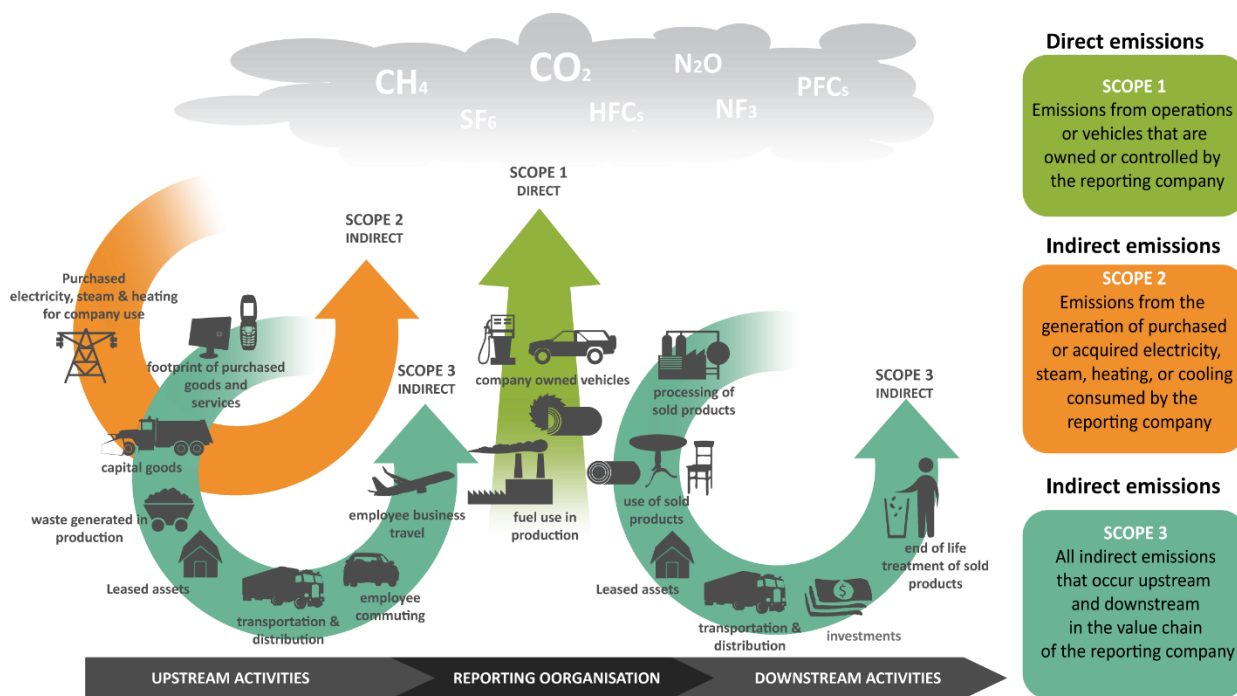

Figure3: Emission scopes – based on the GHG Protocol – Scope 3 Standard

> **!** You should include all significant emissions and strive to be ambitious. Remember that even if certain emission sources are not covered under the minimum requirements, they could hold valuable reduction potential for your organisation.

5.2. Product carbon footprint

You will quantify the carbon emissions arising throughout the full lifecycle of your product from extraction of the raw material to end-of-use (cradle-to-grave).

In cases where end-of-use of products is difficult to predict or a product results in a vast number of end consumer products, a product carbon footprint may cover all life cycle stages until the product is passed on at the company gate (cradle-to-gate).
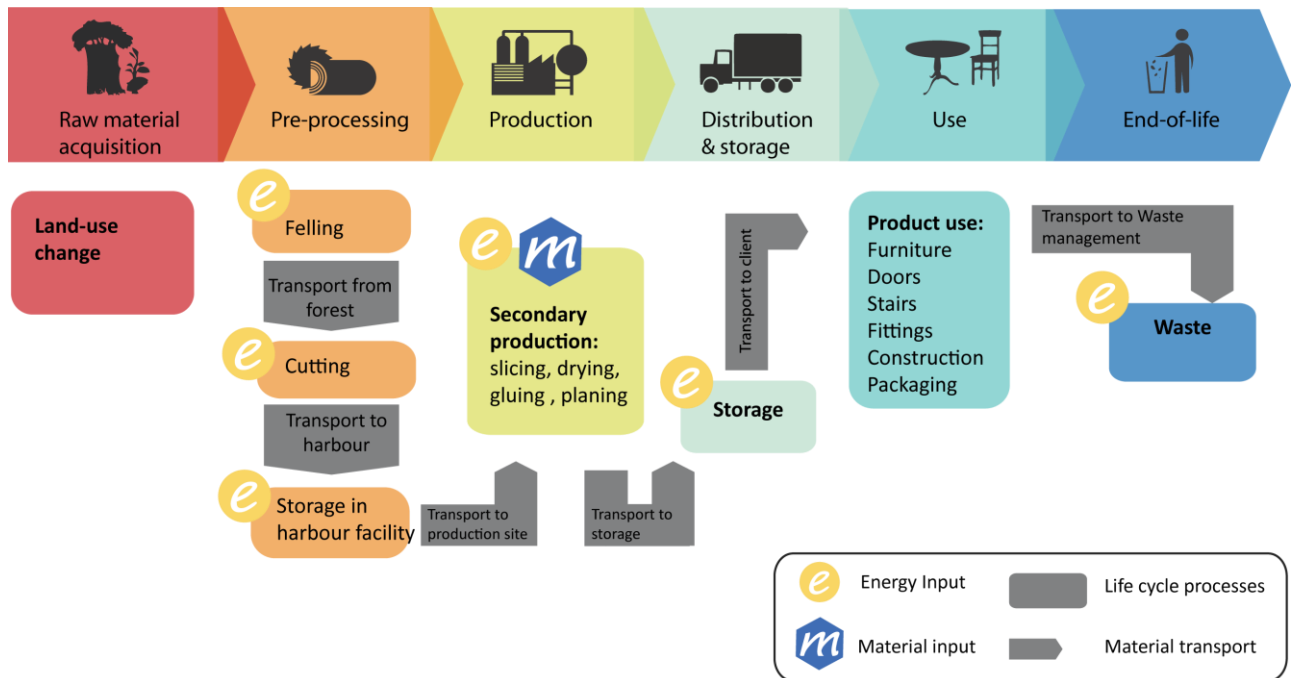
Figure 4: Process mapping for product carbon management

In order to identify you emissions you will need to develop a process map (*see CFM Standard Annex III*), identifying transport activities as well as energy and material input throughout the product lifecycle.

Whenever the product is transported or receives an energy input (e.g. in production processes) or material input (e.g. painting), it results in a carbon emission that needs to be reflected in the product carbon footprint.

5.3.   Collect data

Activity data is collected within your organisation (e.g. energy and steam consumption, fuel usage, business travel, staff commuting etc.) or with your sub-contractors and suppliers (product transport, deliveries, outsources activities etc.). Data may be available to you as primary data - such as meter reading or number of kilometres driven in company cars, or you will need to break down or allocate emissions to specific processed (e.g. transport of products from a currier with many clients and products).

You can choose to collect data in NEPCons CFM Calculation tool.

5.4.   Calculate your baseline

The first carbon footprint you conduct will be your baseline – conducted in your base year. The base year or baseline carbon footprint is used as a reference for you improvements over time.
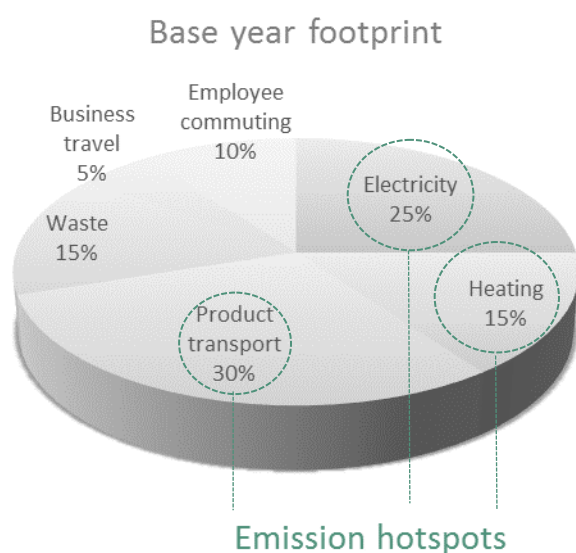
Calculations may be conducted using NEPCon's CFM calculation tool or any carbon calculation sheet or online calculator available to you. Note that the chosen calculation method shall be subject to verification against the CFM standard.

6. Carbon management over time

6.1.   Managing your footprint

The CFM Standard defines not only how to calculate you carbon emissions, but also how you should reduce you emissions over time. Your carbon footprint management plan sets out reduction goals and identifies a plan of action towards reaching each of these. Carbon emissions represent a cost to the product production costs and in many cases, reducing your emissions will result in cost savings.

You must update the plan yearly so that you can gain a clear picture of you continued improvements. Periodic evaluations help you to fulfil your goals set and allow you to correct any errors or omissions arising in your CFM system.

Base year footprint

Business travel 5%
Employee commuting 10%
Electricity 25%
Waste 15%
Heating 15%
Product transport 30%

Emission hotspots

Action plan

1. Out-of-hours system heat saving in production and offices
2. Intelligent light saving system
3. Biomass boiler – use of residual waste
4. Fuel saving transport planning
5. Improved product packaging
6. Climate friendly puchasing policy
7. Employee communting campaign
8. Increase recycling rate
9. Substituting material input with wood

CFM targets

15% Total reduction against base year by year XX

20% Reduction in electricity and heating by year XX

15% Reduction of material input by year XX

10% Reduction in fuel used in-house product transport

7. The certification process

The exact process can vary depending on the individual organisation and the scope of the certificate. We will provide you with the support you need to decide on the certification scope that best suits your business strategy and set-up.

The certification process typically follows these five steps:

1 **Enter service agreement**
Once you have signed the service agreement, a NEPCon contact person is assigned to your organisation. You receive an information pack with resources and tools to help you prepare for certification.

2 **Prepare for certification**
You develop company-specific carbon management procedures which can be a stand-alone document or can be integrated in your existing sustainability or quality management procedures. You need to train all relevant staff. We evaluate and provide feedback on your procedures prior to the on-site visit, covering emission data collection, carbon footprint calculations and your management plan.

3 **On-site audit**
When you are ready, we conduct an on-site assessment at one or more of your sites to check your ability to comply with the requirements. This is primarily carried out through document reviews, site inspections and staff interviews.

4 **Draft report**
We issue a formal report detailing the results of the evaluation which is reviewed by a senior NEPCon expert and submitted to you for comments prior to its completion.

5 **Certification**
When certification is recommended in the final report, NEPCon issues a CFM certificate which is valid for five years*. Your organisation will be listed in the CFM certificate database.

* After you are awarded certification, you will need to undergo annual audits to verify your continued compliance. Additional audits may be required in some cases.

8. A typical on-site audit

The duration and the specific programme of an on-site audit depends on the size of your organisation as well as the technical complexity of your CFM system. It can usually be conducted within a single day.

Prior to the audit you are required to send key documentation to your NEPCon auditor for review. These could include your:

- corporate climate policy
- CFM procedures for data collection
- carbon footprint calculations and results
- carbon footprint management plan
- public CFM communication

Below is an outline of a typical annual audit covering an organisation with a corporate carbon footprint and a relatively simple CFM system.

Opening meeting (approx. 2 hours)

Participants:

- your organisation's CFM certification coordinator
- your organisation's management representatives
- NEPCon auditor

The auditor presents the programme for the day, summarises last year's report and presents the focus of this year's audit. The auditor will inform your organisation about expected changes within the CFM system and answer questions about these changes.

Open non-conformities are always in focus. You will be asked to describe the measures you have taken to follow up on non-conformities and provide information on other changes affecting your organisation's current and future certification.

! *What is additionally covered during a main assessment?* The first audit leading up to your certification is called the main assessment and it differs slightly from annual audits. The opening meeting will often focus on your organisational boundaries, your data collection system and calculation methods. You will be asked to present your Climate Policy and established CFM system to the auditor. Your auditor will present basic facts about the certification and ask general questions about your company's CFM system.

Review of site and system and interviews (approx. 2 hours)

Participants:

- your organisation's CFM certification coordinator
- employees who, by prior agreement, are available for interviews on audit date
- NEPCon auditor

The auditor visits relevant facilities and areas that play a role in the CFM system.

This may include production sites, warehouses, purchase sites and sales and marketing offices. During the inspection, your auditor will typically ask to see electronic meters, biomass stoves, electricity and heat saving systems, evidence of employee travel campaigns etc. If relevant, administrative and financial staff will be interviewed to verify data collection measures. Suppliers or subcontractors may be contacted to confirm emission data input from their end.

You will be asked to demonstrate how your organisation ensures systematic data collection of emission data within and outside of your organisation and how you handle the use of CFM claims and trademark use.

For each of the central functions, your auditor will conduct one or more interviews with employees responsible for implementing certain aspects of the CFM system.

The auditor's own time (30 minutes)

Throughout the auditing process, your auditor has been recording his observations which form the basis for the certification report.

The auditor will often schedule time in between the tour of your facilities and the closing meeting to gather his notes and conclude their initial findings before presenting the results to you.

Closing meeting (30 minutes)

Participants:

- your organisation's CFM certification coordinator
- your organisation's management representatives
- NEPCon auditor

Your auditor presents the preliminary results of the audit, including strengths and weaknesses found in your organisation's CFM system. Any identified non-conformities are presented. Questions regarding the reasons for the non-conformities are discussed and clarified on the spot, where possible.

9.   Non-conformities – an opportunity to improve

Being confronted with non-conformities in the form of minor or major gaps in your CFM system is perfectly normal. We see non-conformities as your opportunity to take action against any mistakes, temporary glitches or flaws in you CFM procedure, your calculation methods or your CFM plan – ensuring that your CFM system is trustworthy and technically sound.

The CFM control system can be characterised as strict but fair. Rigour is necessary to ensure the credibility of the system but the certified organisation has ample opportunity to correct any deficiencies before a certificate is issued, or for certified organisations for their certificate to be suspended or withdrawn.

As with anything, proactively working to prevent non-conformities is usually less work than rectifying non-conformities.

9.1.   Classification of non-conformities

The auditor seeks evidence that verifies your compliance with the CFM requirements. If you are unable to present the necessary evidence, or if the auditor notes evidence of non-compliance, it is the auditor's job to raise a non-conformity, which you must address within a specified time limit.

Non-conformities are classified as "minor" or "major" indicating of their severity. Minor non-conformities are automatically upgraded to major if they are not addressed sufficiently within the specified timeline, or if more than five minor non-conformities are found during a single audit. Lack of or inadequate follow-up on major non-conformities within the deadline usually results in suspension of the certificate with a 30 days' notice.

9.2.   Deadlines for correcting non-conformities

The deadline for following-up on non-conformities is usually one year, i.e. compliance is verified during your next annual audit, which is part of the normal schedule.

For major non-conformities, the deadline is shorter, usually 3 months and in some cases even shorter. Major non-conformities typically imply additional costs to cover an additional audit and the special audit report which lies outside the normal scope of audit work.

9.3.   Observations

Your auditor will also keep an eye on potential problem areas and note them as "observations" in the certification report. "Observations" are weaknesses in your system, where possible risks of future non-conformities are found. Whilst addressing these is not formally required, observations may be used to help you improve your system and to prevent future non-conformities.

9.4.   How to gain the overview of non-conformities

At the end of a certification audit, your auditor will inform you about any non-conformities identified during the audit and ensure that you understand the reason for each non-conformity.

In addition, all non-conformities and observations are stated in the evaluation report which you will receive at the end of each evaluation. Each non-conformity is clearly classified as "minor" or "major" with a specified deadline for compliance.

10. Confidentiality

NEPCon auditors have access to sensitive information about the certified organisations, such as revenue and trading partners. For this reason, our auditors are bound by strict confidentiality requirements and the certification bodies are required to keep all documentation confidential.

Some basic information about the certificate is published on NEPCon's website.

This includes the certificate holders' names, certification and license codes and certificate scope. The information is drawn from the public annexes of your CFM certification report and placed on the CFM database by NEPCon following the issuance of a certificate.

The main purpose of this is to give buyers, investors, public authorities and other the opportunity to verify that a certain organisation has a valid certificate covering the relevant processes and products.

11. Claims and labels

CFM certification provides organisations you with a credible way of communicating your carbon management efforts to consumers, public authorities, investors and the general public.

11.1. CFM on-product and promotional labels

Once you earn certification, you gain access to CFM labels which you can use to promote your certification. The scope of your certificate will determine which label you can use. With your CFM certification you are entitled to three trademark approvals free or charge. If you demonstrate strong understanding of the CFM trademark rules upon more than three label approvals you will be granted a blanket approval, which means that you can issue labels according to your certification without NEPCon's prior approval.

! NEPCon must approve use of the CFM labels prior to publishing or release of labelled products.

11.2. Communication guidelines

Annex VI within the CFM Standard sets out clear guidance on how to make safe claims about your carbon management results.

The annex includes:

- Pre-approved statements
- Introduction to the three levels of claims:
    a. Measuring CO_2
    b. Reducing CO_2
    c. CO_2 neutral
- Principles for using off- and on-product labels
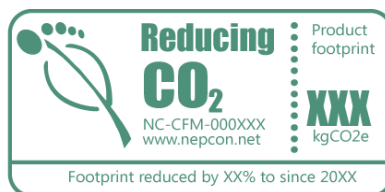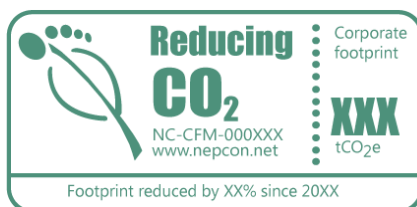
About NEPCon

NEPCon is an international, non-profit organisation that works to ensure responsible use of natural resources and secure sustainable livelihoods worldwide. We aim to transform land-use, business practice and consumer behaviour through the delivery of credible certification services as well as our involvement in innovative projects.

By engaging with companies, organisations and governments, we empower people to be part of the solution in tackling some of the greatest environmental threats facing mankind - including climate change and biodiversity loss.

FSC®, SmartLogging, carbon forest verification and timber legality verification services are provided in collaboration with the Rainforest Alliance. NEPCon is accredited for PEFC Chain of Custody certification (DANAK reg.no.7029).

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A unique perspective

CERTIFIED WOOD UPDATE

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