



CLIMES Management Approach Concept

1. Vision and Mission

The vision and hope related to the implementation of the CLIMES management approach in schools is that the whole school community (students, teachers, parents) will be induced to behave in a climate-friendly way, i.e. to mitigate damages for the climate, and to adapt to the expected changes in climate. The mission connected with well functioning CLIMES management systems in schools comprises the following aspects:

- Schools teach their students how to act in school as well as at home in a climate friendly way (mitigation of climate change) and how to adapt to the forthcoming effects of climate change
- Schools as institutions or organisations themselves behave climate friendly and adapt appropriately to the climate change

2. Objectives

The objectives of the CLIMES management system are:

- Students learn how to act climate friendly.
- Students acquire competences in the application of professional management systems and instruments.
- The institution school is organised in a way that it acts climate friendly and adapts to climate change not only ad hoc but permanently in the long run. All members of the school community are involved: students, teachers, management board, parents, other staff.

3. Basis

The CLIMES management approach is based on the elements and the requirements of the [EMAS-regulation](#) (i.e. EU regulation on the voluntary participation by organisations in a Community eco-management and audit scheme). In its origin the EMAS-system targets on huge enterprises with strong impacts on the natural environment, but is open for small and medium enterprises as well. Schools can take part in the system too. Normally for average school organisations the requirements of EMAS are far too challenging. Therefore the requirements of the CLIMES management approach have been reduced in relation to EMAS and divided into two parts:

- Obligatory core elements with the intention to initiate and maintain a process of continuous improvement. Here a strong relationship to the plan-do-check-act circle of Deming is given even though typically the iterative steps of the Deming-circle are

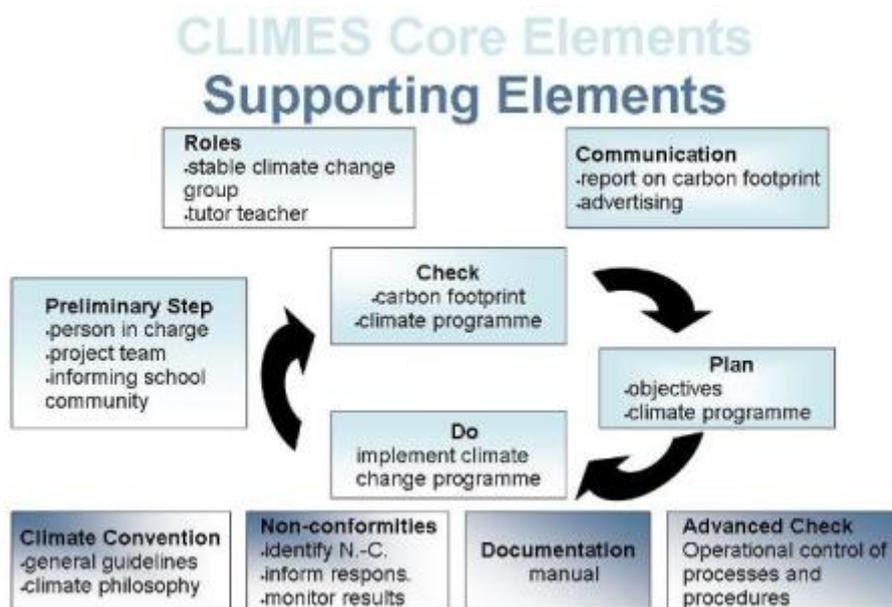


- used for process improvements.
- Voluntary supporting elements that are intended to maintain the management or improvement system in the long run.

4. Elements of the CLIMES Management Approach

The CLIMES management approach consists of core and supporting elements. The core elements are intended to initiate a process of continuous improvement in the schools. They are strongly related to the Deming circle and display its components. At least these core elements of the management approach should be implemented.

In addition several supporting elements are defined. Their main target is to maintain the management system and the process of continuous improvement in the long run.



4.1 Preliminary Step

purpose:

Prior to start with implementing the core elements of the CLIMES management system it would be profitable to do some preliminary steps because the CLIMES management system is intended to strongly influence the complete school organisation. Therefore the whole school community should be informed about the project at least.

components:

The following aspects should be considered:

- determining a person in charge for the project
- forming a project team
- informing the school community.



4.2 Core Elements of the CLIMES Management Approach

The core elements of the CLIMES management approach are the components of the Deming circle (plan, do, check, act) added by a definition of basic responsibilities and a basic level of internal and external communication. In the following the purposes and main aspects are illustrated.

4.2.1 Check

purpose:

The intention of the CLIMES management element „check“ is to identify climate change influencing aspects of school's activities, to get an idea of the quantity of these effects and in the case of taken measures to assure that the school is heading to the right direction.

components:

First the CLIMES management element „check“ means that those operations of the school have to be analysed, measured and monitored that influence climate change significantly. These are:

- energy use (for equipment, lighting, heating, air-conditioning etc.)
- traffic (fuel consumption) induced by school
- school meals
- water use
- waste disposal

Regularly the carbon footprint (= total carbon dioxide emissions within a period) of the school has to be calculated upon the collected data using a well defined carbon footprint calculator (e.g. from the dott07 project).

Secondly the progress in implementing the planned activities of the schools' climate change programme (see element „plan“) has to be monitored and evaluated.

4.2.2 Plan

purpose:

The intention is to make the school acting in a precise way and not only to highlight school's effect on climate.

components:

Based on the results of the „check“ activities have to be planned to reduce the carbon footprint of the school (mitigation measures) or to adapt to the climate change (adaption measures). This means



- to determine the strategic climate relevant aspects
- to define the climate relevant objectives and targets for the school to be reached within a specified period
- to specify a climate change programme with activities, responsibilities as well as financial and other means to achieve the objectives and targets.

4.2.3 Do

purpose:

The aim of this management element is to assure that the activities defined in the climate change programme will be implemented.

components:

Procedures to get the authorisation of the school manager to implement the climate change programme have to be established.

4.2.4 Elementary Roles and Responsibilities

purpose:

The intention of this management element is to assure that sufficient manpower with defined roles and responsibilities is available for the implementation as well as for the maintaining of the CLIMES management system.

components:

At least the following positions have to be established and the relevant tasks have to be defined:

- stable climate change group (students – periodically some students, extremely dedicated to environmental or climate change topic both within and outside the school, joining meetings, conferences, exhibitions, etc., could be elected to join the group)
- tutor teacher to coordinate the climate change group, appointed by the school manager.

4.2.5 Elementary Communication

purpose:

An elementary communication related to climate change issues serves to inform the school manager, the complete school community as well as the interested public about the actual climate influence of the school and to promote climate friendly behaviour.

components:

The defined and established CLIMES elementary communication procedures comprise

- reporting the results of the climate checks and the carbon footprints to the school



- manager
- publishing the above mentioned results via school website and/or other media.

4.3 Supporting Elements

4.3.1 Climate Convention (Schools' Climate Guidelines)

purpose:

The climate convention of the school serves as general guideline of the school concerning its general behaviour and willingness related to climate change aspects. The significance of the climate change for the school is defined for the long run.

components:

Climate willingness is added to existing school conventions or general guidelines and published.

4.3.2 Non-conformity, Corrective Action and Preventive Action

purpose:

With the core management element „act“ (see above) it is assured that in the case of discrepancies or non-conformities related to the schools' climate change programme corrective actions will be taken. But in daily school operations other deficiencies or defects may exist having effects on climate change (e.g. leaky windows, permanent lighting, permanent stand-by operation of facilities etc.) and no responsible person is occupied to solve these problems. Therefore the intention of the supportive management element „non-conformities“ is to assure that existing deficiencies get known to the relevant responsible persons and that adequate solutions are trailed.

components:

Structures and procedures have to be defined

- to identify climate-relevant non-conformities (e.g. complaints & suggestions box, either real and/or virtual, looked after by the climate group)
- to inform responsible persons (e.g. school manager, caretaker etc.) to make them taking action(s) to mitigate the climate relevant impacts and to avoid their recurrence
- to monitor the results (e.g. climate group)

4.3.3 Advanced Roles and Responsibilities

purpose:

In addition to the management element „elementary roles and responsibilities“ here all climate relevant tasks, responsibilities and authorisations have to be clearly worked out and defined. So it serves to get clear responsibilities related to climate change tasks on



various school levels.

components:

Tasks, responsibilities and authorisations have to be defined related

- to climate relevant operations of the school (e.g. electronic facilities, heating plant, air-conditioning unit, school meals etc.)
- a specific climate management representative within the school's management board.

4.3.4 Advanced Check and Operational Control of Processes and Procedures

purpose:

Within the CLIMES core management element „check“ climate relevant operations of the school are identified, regularly checked and the carbon footprint is calculated regularly too. Now the intention is to get control over all processes and procedures that influence climate change significantly and to check if they are operated in the defined way.

components:

Procedures for the following aspects have to be defined:

- identifying and regulation of climate relevant processes and procedures in school (e.g. preparation of meals in the canteen or cafeteria, heating and air conditioning etc.)
- operational control of processes and procedures influencing climate change
- internal auditing of the management system
- evaluation of compliance with applicable legal requirements and other requirements to which the school subscribes.

4.3.5 Documentation

purpose:

A formal written documentation serves to get an overview over the complete implemented management system. So all relevant tasks, responsibilities, processes and procedures are comprehensible and transparent.

components:

A manual of the climate management system has to be compiled.