SUSTAINABLE DEVELOPMENT AT THE ICRC

June, 2013

First Annual Report for 2012

ICRC

Executive summary

This is the first annual report on sustainable development at the ICRC.

It documents the progress that has been achieved in the implementation of sustainable development principles throughout the organization, using the 'Framework for Sustainable Development at the ICRC' as a reference point. This document, approved by the directorate in September of 2011, outlines the commitment of the ICRC to incorporate sustainable development principles into the modus operandi of the organization, defining seven key objectives that need to be fulfilled for this to be achieved.

One of the seven objectives given in the 'Framework for Sustainable Development at the ICRC' is for reference indicators for sustainable development to be defined and reported on annually. Monitoring progress and measuring performance is important, as a means to prioritize problems and to make feasible plans of action.

In Chapter 1 of this report, four delegations and the headquarters (HQ) are measured using six newly developed indicators for sustainable development, which show some aspects of environmental and social performance in the sites examined. For a more comprehensive analysis in the future, more indicators will need to be developed across the social, economic and environmental dimension, the three domains of sustainable development. Also, a more comprehensive analysis can only be made in the future with the availability of historic data, which will allow the results of different sites to be compared over time. Therefore, in this report, the methodology for the calculation of each indicator is clearly explained to lay the groundwork for future reporting and notably to monitor progress against the 2012 results.

The four delegations of Bogota, Paris, New Delhi and Nairobi have been chosen to feature in this report as they already started measuring their environmental impact as the original 'pilot' participants of the Pilot Project[1]. This project, started in early 2012, provides support to delegations to monitor and improve their usage of natural resources and their production and management of waste. Each participating delegation has a working group composed of ICRC employees who volunteer to investigate, develop and promote sustainable practices in their delegations. Although not part of the Pilot Project, HQ also has a tradition of measuring its resource use and so also features in this report.

Chapter 2 presents some innovative initiatives started over the past several years aimed at reducing the environmental impact of some of the ICRC's activities. These initiatives are designed to solve complex problems in the fields of resource management, and hazardous waste treatment. They examine the feasibility of using existing technologies rarely used in humanitarian organisations, showing the importance of working with external partners who can provide the expertise and technical know-how where needed. Particular attention is also dedicated to the ICRC's supply chain which has a major impact in the three domains of sustainable development, from the manufacturing process to the beneficiaries.

A mapping with an overview of all existing initiatives and policies put in place related to sustainable development can be found in Chapter 3. This is linked back to the seven objectives of the Framework. The diversity of these initiatives and policies shows the gradual mainstreaming of sustainable development at the ICRC.

[1] This pilot phase had to test the willingness of the delegations to implement the framework and, in Geneva, to define a first set of key indicators and to identify the right tools to measure this.

In Chapter 4: 'The Way Forward' some recommendations are proposed. Although the progress made related to sustainable development and the amount of initiatives put in place is encouraging, some key issues remain, which could jeopardize the progress made. For instance, the members of the working groups for sustainable development are volunteers, motivated and willing to implement concrete actions in their delegations. But, even if they are fully supported by the management, they can dedicate very little time (less than 2 hours per month) to the project, meaning that progress is relatively slow.

Furthermore, some training would be necessary for them to be able to identify some technical issues in the delegations which will need further investigation. When the issues will be clearly identified, the key challenge will be to propose concrete technical solutions to complex problems that are in line with sustainable development principles and that use available and green technologies. This can only be achieved by people with appropriate technical expertise and know-how, who will provide the necessary support.

To address these challenges and to keep the momentum gathered for sustainability issues so far, additional human resources are needed, through the creation of a sustainable development competence unit based on the field. This unit, composed of a team of two people, would support the delegations in investigating existing technologies that can be used in humanitarian organizations, and also support HQ to put in place the tools to manage and organise all the data required in order to report regularly on the indicators.

Below is a summary of the recommendations given in Chapter 4: The Way Forward, for more detail please refer to this section in the report.

Summary of recommendations given in The Way Forward

1.	Official recognition of the head of the working group in the field	Formalizes the working group structure and empowers the heads of the working groups to tackle sustainable development in their delegations.
2.	Participation of an administrator in each working group	Important for access to key data for sustainable development indicators, as well as knowledge on the practicalities of implementing projects in the delegations
3.	Promote and apply the FEMAP* more systematically	To help in identifying and understanding the potential environmental impacts and implications of our activities.
4.	Continuing external partnerships	Necessary for up-to-date technical know-how and expertise for green solutions in the field and in support activities
5.	The development of an 'Environment and sustainable development competence unit' based in the field	Crucial for identifying existing green technologies that can be used in the field in collaboration with the external partners and academic institutes. The unit will also support HQ data collection and training activities.
6.	Continuing and expanding the sustainable development reporting process	Allows for a more comprehensive analysis to be made on sustainable development in each site

***Framework for Environmental Management in Assistance Programs**

Table of contents

INTRODUCTION

When the Framework for Sustainable Development at the ICRC was adopted by the directorate in September 2011, the commitment was made to incorporate principles of sustainable development into the modus operandi of the organization and to report on progress on an annual basis. This is the first annual report on the implementation of the Framework on Sustainable Development, for the period of 2012. The report allows taking stock on the progress made in the implementation of the Framework, to highlight innovative initiatives taken and to make recommendations for the future.

In the first chapter, the report focuses its analysis on four pilot delegations (Bogota, Paris, Nairobi and New Delhi) who voluntarily accepted to participate actively in the inclusion of environmental concerns in operational planning and the management of their delegation. It also captures the activities led at ICRC headquarters. The performance of the four delegations and HQ is measured by the use of several key indicators of sustainable development. The report explains the methodology used to select the indicators, laying the groundwork for future reporting.

The second chapter provides an insight into innovative techniques and initiatives used in the field, and in different areas of the organization. This chapter focuses mainly on the environmental domain of sustainable development.

In addition, to give an overview of what has been done to implement sustainable development principles at the ICRC so far, a mapping of all of existing sustainable development initiatives and policies linked to the objectives of the Framework are made available in the third chapter.

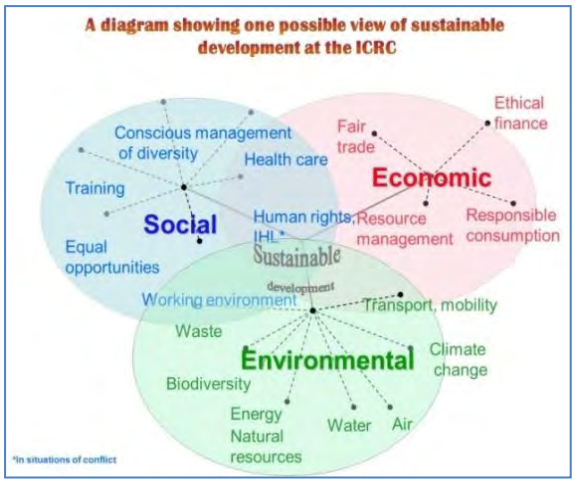
Finally, in Chapter 4: 'The Way Forward', recommendations are made for the future, to address current challenges and keep the momentum gathered in integrating sustainable development principles at the ICRC.

0 Background

0.1 What is sustainable development?

Sustainable development is most commonly defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland Report, 1987)

The concept is often visualized by three intersecting circles, representing three domains that interact and influence each other: the environmental, the social and the economic domain. In order for a system or policy to be sustainable, there must be a balance between the requirements of these three domains. For the ICRC this has been defined as:



The three domains of sustainable development at the ICR

1. Reducing the potentially negative impact of its activities on the environment.
2. Making optimal use of financial resources.
3. Being a socially responsible partner in its interactions with stakeholders (employees, beneficiaries, State and non-State actors, donors).[2]

Evaluating a system in terms of sustainable development thus requires a holistic approach that considers these three domains.

0.2 The importance of Sustainable Development at the ICRC

There is an increasing awareness of the importance of taking into consideration the principles of sustainable development at the ICRC. It is becoming clear that sustainable development is in line with the ICRC's mission of assisting and protecting victims of conflict and other situations of violence. The ICRC works with vulnerable people, in countries where often laws are flouted, natural resources are limited or non-existent and ecosystems are fragile.[3] This can complicate the design and implementation of adapted humanitarian responses. It also puts the ICRC in a position of bigger responsibility with regard to its possible negative impacts on the social, economic and environmental domains. In the long term, taking these factors and their interactions into consideration helps to design better responses to the needs of the beneficiaries and to better prepare the post-emergency phases.

[2] Framework for Sustainable Development at the ICRC, November 2011, p.5

[3] As a review of PfRs in 2012 showed, the environmental domain is nearly always mentioned as an element of concern, highlighting the importance of taking environmental issues into consideration when developing programs. See https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents%20de%20rfrences/ENVIRONMENTAL%20REVIEW%20OF%20THE%20FIELD%20PFRS%202012%20compressed.pdf

0.3 The Framework for Sustainable Development at the ICRC

The Framework for Sustainable Development, adopted by the Directorate in 2011, outlines the commitment of the ICRC regarding sustainable development, in order to act as a responsible organization in society. Starting with a strategic vision, it gives objectives and areas of intervention to ensure a better integration of a transversal approach in the institution. It also aims to demonstrate that considering principles of sustainable development is consistent with the values and principles of the institution.

> *'The ICRC integrates the principles of sustainable developments into its activities and practices and provides an appropriate, quality, sustainable response to the needs of the victims of armed conflict and other situations of violence. Adherence to these principles enables the ICRC to reduce the potentially negative impact of its activities on the environment, to make optimal use of its financial resources and to interact with stakeholders as a socially responsible partner.* (Strategic Vision for Sustainable Development at the ICRC)[4]

The ICRC has defined seven specific objectives and areas of intervention to address the challenges of sustainable development in the coming 10 years. The objectives take into consideration environmental responsibilities (shown in green), social responsibilities (blue), economic responsibilities (red) and general requirements (grey).

Objective 1:	**Objective 2:**	**Objective 3:**	**Objective 4:**
Reducing the potential impact of environmental degradation and climate change on victims of violence.	Controlling the environmental footprint of ICRC operational and support activities.	The ICRC takes the social dimension into consideration in its capacity of employer and responsible organization.	The rules and principles of ethical conduct are systematically applied to the management of financial resources.

Objective 5:	**Objective 6:**	**Objective 7:**
Reference indicators for sustainable development parameters are defined and are subject to annual reporting.	The ICRC staff members adhere to the idea of sustainable development and put it in practice in their work.	Implementing the principles of sustainable development makes a concrete contribution to the ICRC's general partnership objective.

These objectives are referred to throughout the report, not necessarily in the same order as given above, but when a particular objective is relevant to the subject described.

[4] Framework for Sustainable Development at the ICRC, November 2011, p.5

Chapter 1: Indicators for sustainable development

1 METHODOLOGY

1.1 Scope of the report

This report provides information on selected environmental and social indicators for four delegations or 'sites': Bogota, Paris, Nairobi, and New Delhi and for HQ.

It is important to note that the compound of Nairobi includes the Somalia delegation and the premises of Paris also include Europe. For these two cases the environmental indicators look at all of the staff working in these sites, without distinction, as they share the same resources.

Framework objective 5:

Reference indicators for sustainable development parameters are defined and are subject to annual reporting.

However, for the social indicators, the Nairobi and Somalia delegations are analysed separately to accommodate the differences in operational contexts. For Paris it does not make sense to make a distinction between the Paris and Europe delegations as the number of employees analysed is very small.[5]

The delegations that have been chosen are part of the Sustainable Development Pilot Project, which was launched in early 2012. [6] The Pilot Project provides support to delegations wishing to monitor and improve their usage of natural resources, and their production and management of waste. Each participating delegation has a working group composed of ICRC colleagues (resident and mobile) who voluntarily dedicate to investigate, develop and promote sustainable development principles in their delegations. Since these delegations have already started the measurement process they are ideally suited to be measured in this report.

Although it is not part of the Pilot Project, HQ is also featured in the report as it has followed the same methodology of collecting data on sustainable development for several years, showing that the same methodology can be applied in Geneva.

As sustainable development is a transversal topic, attention has been made in this report to avoid duplicating the reporting processes of other departments at the ICRC. For instance, for the social domain, readers should refer to the Annual Gender Report[7] or the Report of the Ombudsman[8]. For an insight into the economic domain, the 'Etats Financiers' is the primary reference. Finally, concerning the reporting procedures of assistance programs, although guidelines and best practices related to environmental management exist, the number of programs that follow these guidelines has not been quantified. For the time being, the ICRC is focusing on disseminating the best practices and guidelines used in assistance programs. However, in order to determine the number of programs that fulfil sustainable development requirements, a methodology has to be defined.

[5] These kinds of specificities are explained in the methodology and scope of each indicator page.
[6] For more information see the "Delegation Profile"
[7] For example the Gender Equality Report for 2011, see http://intranet.gva.icrc.priv/structure/humanresources/gender-equality/gender-report-2011.pdf
[8] For example the report for 2011, available at http://intranet.gva.icrc.priv/social/staff/ombudsman/2012-ombudsman-report-eng.pdf

1.2 How can the ICRC measure its performance in sustainable development?

This question was adressed in a study done by an ICRC staff member for a diploma in CSR, at the Geneva University[9] , in coordination with the advisor of sustainable development. After comparing different internationally recognized measurement systems for sustainable development, with the requirement that the system should be light in term of resources (human and financial) as well as easy to communicate, the choice was made to refer to the Global Reporting Initiative (GRI) as a general guideline. The GRI has pioneered and developed a comprehensive Sustainability Reporting Framework that is widely used in organizations around the world. [10] Indicators from the GRI have been selected and adapted to the specificities of the ICRC.

All of the indicators adapted from the GRI are process indicators: they measure sustainable development performance in the process of conducting ICRC activities and not the impact of ICRC activities on beneficiaries.

1.3 Indicators featured in this report

In this first report, a limited number of indicators are reported on. Six indicators are presented for the environmental and social domains.

While many institution-wide structures and systems exist at the ICRC to ensure the sustainability of the economic domain, this has not yet been developed into indicators for this current report. The initiatives for the economic dimension are listed in the mapping at the end of the report. In future reports, it can be measured with appropriate indicators as it is recognised that this is only an initial phase and that, for a more comprehensive view, more indicators will be necessary across the three dimensions . This approach will be in constant evolution as the ICRC develops its expertise on sustainable development reporting. This is also advised by the GRI which proposes an incremental reporting procedure[11].

The indicators give an overview of performance in sustainable development for each delegation. They are particularly useful for pointing out possible problems in the system. When a specific issue has been identified as problematic, a more in-depth analysis has to be done with the department or the delegation in question.[12] More conclusions can be drawn when historical data is available for each delegation. This will also allow specific targets to be made for each indicator in the different delegations, which will be linked to a plan of action.

---

[9] See report 'How can the ICRC measure its performance in sustainable development?' By Samuel Racine

[10] The Global Reporting Initiative (GRI) is a non-profit organization that promotes economic, environmental and social sustainability. GRI provides all companies and organizations with a comprehensive sustainability reporting framework that is widely used around the world. GRI has also developed a NGO sector supplement (https://www.globalreporting.org/Pages/default.aspx)

[11] Refer to GRI application level guidelines at www.globalreporting.org

[12] For instance, a delegation that uses 5 times more water than the other delegations will need to investigate why this is the case. However, in its particular context, there could be a valid reason for it. On the contrary, when the indicator appears good, we do not need to spend too much time and resources in improving a system that already functions well.

In this first sustainable development report, the following indicators are reported on:

1.3.1 Environmental indicators

Framework objective 2:

Controlling the environmental footprint of ICRC operational and support activities

The ICRC has a significant impact on the environment. On the input side, energy, water and natural resources are used in order to be able to conduct operations. These inputs result in an output of strong environmental significance such as emissions, effluents and waste.[13]

Indicator	Relevance
E1 Energy – Total energy by primary source used in the premises	Scarcity, cost, CO2 production and other waste
E2 Water consumption – Total water used per employee per day	Scarcity and cost.
E3 Waste (Paper) – Total sheets of paper per employee per day	Proxy indicator that reflects the general attitude towards waste management.
E4 Waste (CO2) – Total CO2 emissions from all ICRC vehicles and generators	Pollution, impact on climate change and cost.

[13] These processes are made possible by half a million m² of offices warehouses and other buildings, 880 households, 27,000 IT equipment, and over 18 million litres of fuel per year for some 3,000 vehicles and 1,300 generators that are used by the ICRC.

1.3.2 Social indicators

The need to include sensitivity and responsiveness to gender in program design and implementation is widely accepted and expected. Gender equality at the ICRC is a quality and effectiveness factor; gender balance in the teams of professionals at all levels enables the perspectives, approaches and styles of men and women to complement each other.

Framework objective 3:

The ICRC takes the social dimension into consideration in its capacity of employer and responsible organization.

Indicator	Relevance
S1 Gender **a) Gender breakdown per delegation and HQ**	Balanced teams improve efficiency. Equal access at all levels of positions within the institution.
b) Gender breakdown by managerial position per delegation and HQ	Representation of women at all levels of the institution.

1.3.3 Economic indicators

It is important that the ICRC manages its financial resources in an efficient, accountable and transparent way in order to meet its responsibilities towards all its stakeholders.

Economic indicators will be presented in future reports.

Framework objective 4:

The rules and principles of ethical conduct are systematically applied to the management of financial resources.

Results by indicator

E1 ENERGY – DIRECT ENERGY CONSUMPTION BY PRIMARY ENERGY SOURCE

RELEVANCE

The ability of the reporting organization to use energy efficiently can be revealed by calculating the amount of energy it consumes. Energy consumption has a direct effect on operational costs and exposure to fluctuations in energy supply and prices. The environmental footprint of the organization is shaped in part by its choice of energy sources. Changes in the balance of these sources can indicate the organization's efforts to minimize its environmental impacts.

Based on the GRI Indicator 'EN 3: Direct energy consumption by primary energy source' (NGO Sector Supplement, Version 3.0)[14]

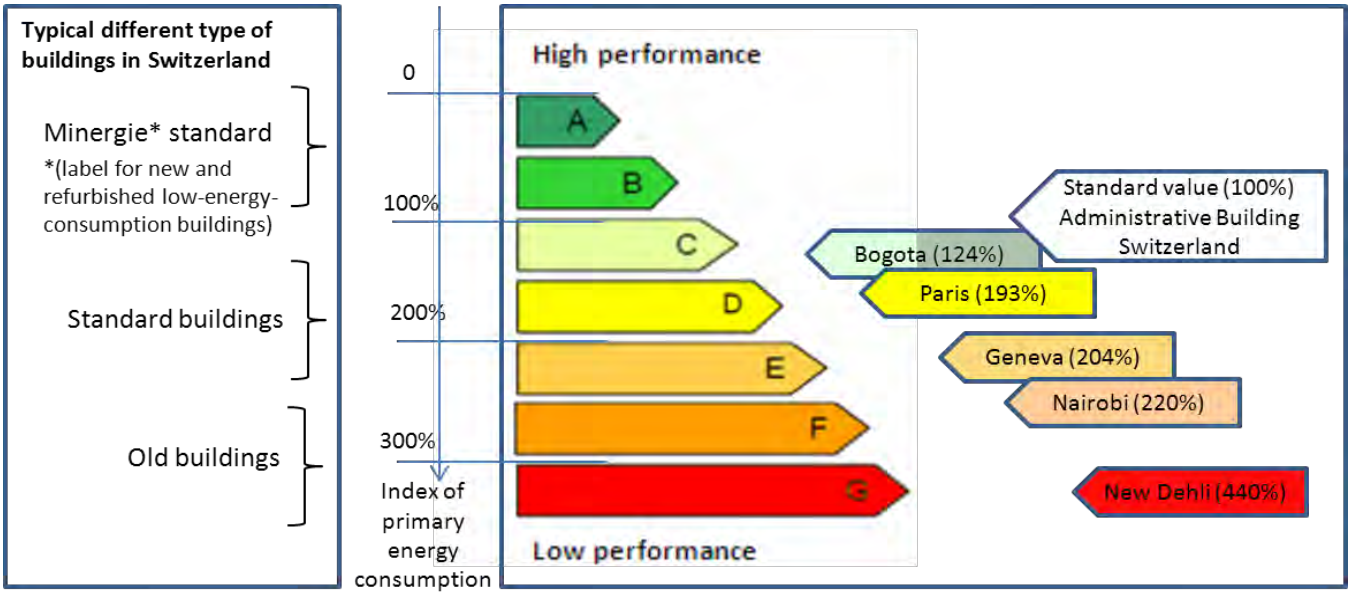
METHODOLOGY FOR DATA COLLECTION

This is found by adding the different types of energy consumed in each site, weighed by their primary energy factor and comparing this with the energy reference area, which is linked to the surface area of the building. (See Energostat document in Annex.)

SCOPE

Four pilot delegations (Bogota, Paris, Nairobi and New Delhi) and HQ. The data are related to the buildings of the delegations and the main buildings of HQ (excluding Ecogia and Satigny.)

PERFORMANCE



Important note

Results among delegations and headquarters cannot be compared as such. To be considered are the type of operations, the surface of gardens, surface of premises, climatic differences and social and economic factors. This data are presented jointly only to help understanding results. In future reports and when historical data will be available, the report will compare evolutions over time and only make a comparison for the delegations of the same type (for instance all delegations in Africa with a garden and building over 500 m2).

OBSERVATIONS:

- The delegation of Paris has only one significant energy consumer (the heating system) while New Delhi and Nairobi have three big energy consumers (heating system, air conditioning and outdoor lighting system). Bogota has a heating system and outdoor lighting system but doesn't use an air conditioning system.
- The delegations of Nairobi and New Delhi each have to rely on a generator for its power supply. The others delegations get the electricity from the city power supply 24h/day.
- All delegations use energy-saving lamps.

ACTIONS DONE TO IMPROVE PERFORMANCE

Awareness campaigns on energy saving practices are taking place in Paris and Bogota.

SOURCE OF DATA	PERIOD OF MEASUREMENT
Administrators in the delegations of Paris, Nairobi and Bogota and New Delhi. Calculated from invoices. Zanetti Ingenieurs-Conseils for HQ.	01.01.2012 – 31.12.2012

[14] For further information refer to the complete GRI guidelines at https://www.globalreporting.org/resourcelibrary/NGOSS-Complete.pdf

E2 WATER –WATER CONSUMPTION

RELEVANCE

Clean freshwater is becoming increasingly scarce. Reporting on total consumption of water withdrawal contributes to the understanding of potential impacts and risks. The systematic effort to monitor and improve the efficiency of water usage is directly linked to water consumption costs. Monitoring on water withdrawal is also important in order to detect potential leaks, overconsumption or misuse. Moreover, in regions where water sources are restricted, the water consumption patterns can also influence relations with other stakeholders.

Based on the GRI indicator 'EN8: Total water withdrawal by source' (NGO Sector Supplement, Version 3.0). [15]

METHODOLOGY FOR DATA COLLECTION

Identify the total volume (Lt) of water withdrawn from any water source that was either withdrawn directly by the delegation or by intermediaries such as water facilities. Water sources are: surface water (including wetlands, rivers, lakes and oceans), ground water, rainwater, wastewater, municipal water or other water utilities (e.g. water trucking).

Information on water withdrawal can be drawn from water meters, water bills, calculations derived from other available water data or (if neither water meters nor bills or reference data exists) the delegation's own estimates.[16]

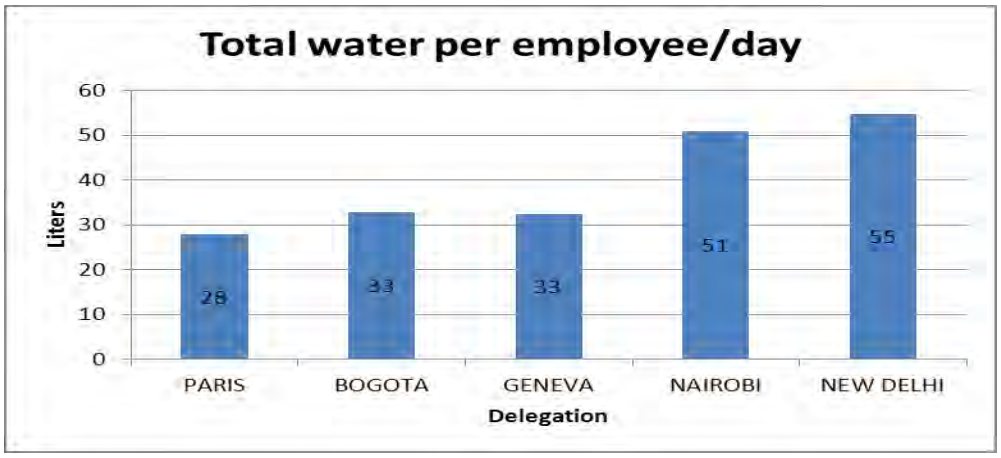
To facilitate understanding, the volume is divided by the total number of employees.

By total number of employees it is understood, the average number of full time positions (FTP) in the delegation during the measured period (yearly mathematical average).

SCOPE

Four pilot delegations (Bogota, Paris, Nairobi and New Delhi) and HQ. The data are related exclusively to the buildings of the four delegations and HQ (excluding Ecogia and Satigny.)

PERFORMANCE



Important note

Results among delegations and Geneva cannot be compared as such. To be considered are the type of operations, the surface of gardens, surface of premises, climatic differences and social and economic factors. This data are presented jointly only to help understanding results. In future reports and when historical data will be available, the report will compare evolutions over time and make a comparison for the delegations of the same type (for instance all delegations in Africa with a garden and a building over 500 m2).

OBSERVATIONS:

- The delegation of Bogota has put in place water saving devices that should help to reduce their water consumption.
- The delegation of Nairobi, in addition to the water distribution network relies on water trucking.
- All delegations except Paris have a garden and water the garden.

ACTIONS DONE TO IMPROVE PERFORMANCE

To improve the situation, Nairobi built a rainwater harvesting system with a capacity of 12,000 L in their delegation in early 2013, connected to 4 toilets and also used to water the garden.

SOURCE OF DATA	PERIOD OF MEASUREMENT
Administrators in the delegations of Paris, Nairobi and Bogota and New Delhi. Calculated from invoices. Zanetti ingenieurs-conseils for HQ.	01.01.2012 – 31.12.2012

[15] For further information refer to the complete GRI guidelines at https://www.globalreporting.org/resourcelibrary/NGOSS-Complete.pdf

[16] As advised by the GRI guidelines for calculating 'EN 8 Total water withdrawal by source' (NGO Sector Supplement, Version 3.0)

E3 WASTE – (USE OF PAPER AS A PROXY INDICATOR)[17]

RELEVANCE

Data on waste generation over several years can indicate the level of progress the organization has made towards waste reduction efforts. It can also indicate potential improvements in process efficiency. From a financial perspective, the reduction of waste contributes directly to lower costs for material, processing and disposal.

Based on the GRI indicator 'EN 22: Total waste by type and disposal method.' (NGO Sector Supplement, Version 3.0).[18]

METHODOLOGY FOR DATA COLLECTION

Identify the amount of waste created by the delegation by: 1) hazardous waste (as defined by the national legislation at the point of generation) and 2) non-hazardous waste (all other forms of solid or liquid waste excluding wastewater).[19]

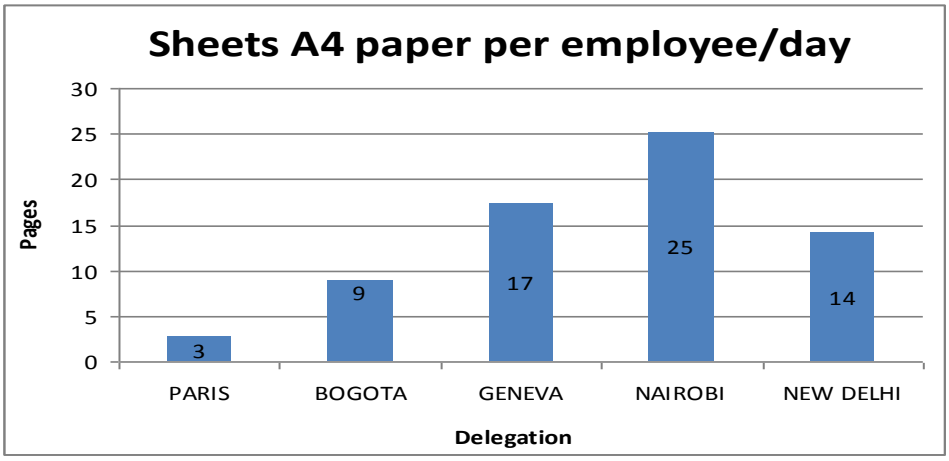
The pilot delegations have been asked to report at this stage on a qualitative study to assess how the delegation process and recycle different kind of waste[20]. Furthermore, as it is assumed that paper consumption can be considered as a proxy indicator on how the delegation deals with waste a quantitative indicator was put in place to measure the use of paper.

Paper consumption by employee/day is taken to mean the amount of pages of A4 paper purchased by the delegation in a year, divided by the total number of employees and 365 days. By total number of employees it is understood, the average number of full time positions (FTP) in the delegation during the measured period (monthly mathematical average).

SCOPE

Four pilot delegations (Bogota, Paris, Nairobi and New Delhi) and HQ. The data are related exclusively to the paper used in the main buildings of the four delegations and all of HQ (in this case, including Ecogia and Satigny.)

PERFORMANCE



Important note

Results among delegations cannot be compared as such, as they illustrate different contexts. This data are presented jointly only to help understanding results. In future reports and when historical data will be available, the report will compare evolutions over time and only make a comparison for delegations of the same type.

OBSERVATIONS:

- Nairobi does not recycle paper. Paris uses an official channel while New Delhi and Bogota use an unofficial recycling channel (local families collect the paper for resale purposes).

ACTIONS DONE TO IMPROVE PERFORMANCE

- Awareness campaigns on paper consumption in Paris, Bogota and Nairobi.
- The delegation of Nairobi has started to investigate why their paper consumption is so high.

SOURCE OF DATA	PERIOD OF MEASUREMENT
Administrators in charge of the delegations of Paris, Nairobi and Bogota and New Delhi. Calculated from invoices. For HQ, Patrick Bailo (FAD/BAT)	01.01.2012 – 31.12.2012

[17] A variable used to stand in for one that is difficult to measure directly.

[18] For further information refer to the complete GRI guidelines at https://www.globalreporting.org/resourcelibrary/NGOSS-Complete.pdf

[19] As advised by the GRI guidelines for calculating 'EN 22: Total waste by type and disposal method.' (NGO Sector Supplement, Version 3.0)

[20] This can be found in the Delegation Profiles under 'Waste Management at the Delegation'

E4 WASTE - (C02 EMISSIONS FROM VEHICLES AND GENERATORS)

RELEVANCE

Carbon dioxide (C02) is a toxic gas, which plays an important role in the greenhouse effect and consequently on climate change.

This indicator measures the C02 emissions from vehicles and generators in 4 sites for an entire year, in this case, 2012. For explanatory purposes, a breakdown of vehicles and generators in each site is also given.

Based on the GRI indicator 'EN 16: Total direct and indirect greenhouse gas emissions by weight.' (NGO Sector Supplement, Version 3.0)[21]

METHODOLOGY FOR DATA COLLECTION

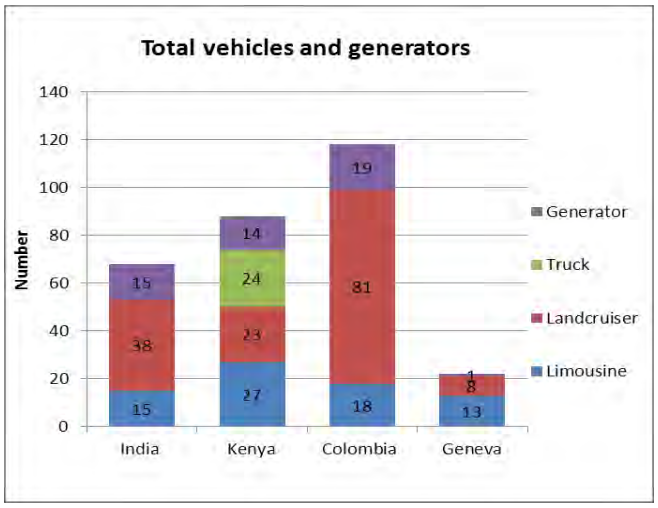
C02 emissions are calculated by finding the total amount of fuel consumed for each vehicle and generator, and multiplying this by a factor which gives the number of kilograms of CO2 generated per liter. This factor is 2.8 for vehicles using petrol and 2.662 for vehicles and generators that use diesel.[22]

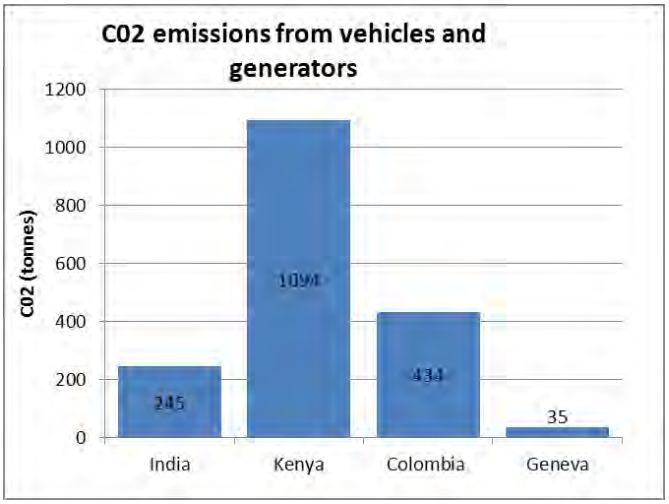
SCOPE

Three countries of the pilot delegations (Kenya, India and Colombia) and HQ are shown. Somalia is included with Kenya as it is not possible to have a breakdown of figures. Vehicles and generators are ICRC properties. Other vehicles and generators, which are rented or which do not belong to ICRC are not taken into account.

Paris has been excluded from this analysis as it does not have a fleet of vehicles or generators.

PERFORMANCE





Important note:

Results among the different sites cannot be compared as such, as they illustrate completely different contexts. This data are presented jointly only to help understanding results.

OBSERVATIONS

- Differences in emissions are due to the type of vehicle that is used, the distances travelled with each one or in the case of the generator, the operating time.
- Colombia has the biggest fleet of vehicles and generators but they produce less CO2 than in Nairobi. This is due to the fact that Nairobi uses its fleet in a much more extensive way. Furthermore Nairobi's fleet is composed of a significant quantity of trucks, (none in Colombia or in India) and this kind of vehicle consumes more diesel than a land cruiser or a limousine for the same distance.
- All sites use approximately the same amount of generators, not as a primary source of energy but as a backup energy source.

SOURCE OF DATA	PERIOD OF MEASUREMENT
LOG_FLEET (Fleet Wave program)	01.01.2012 – 31.12.2012

[21] For further information refer to the complete GRI guidelines at https://www.globalreporting.org/resourcelibrary/NGOSS-Complete.pdf

[22] See http://www.viacombi.eu/fr/

S1 A – GENDER BREAKDOWN PER DELEGATION AND HQ

RELEVANCE

Gender- balanced teams allows the ICRC. *to: i) work in greater proximity to all victims, women and men, by enhancing its understanding of their specific needs;* ii) *to adapt more easily to change, to make it more creative and innovative, thanks to an enhanced capacity for analysis; iii) to manage its resources more effectively because of the range of managerial styles deployed.*

This indicator gives the representation of men and women in each site.

This is based on the GRI indicator 'LA 13: Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity' (NGO Sector Supplement, Version 3.0). [23]

METHODOLOGY FOR DATA COLLECTION

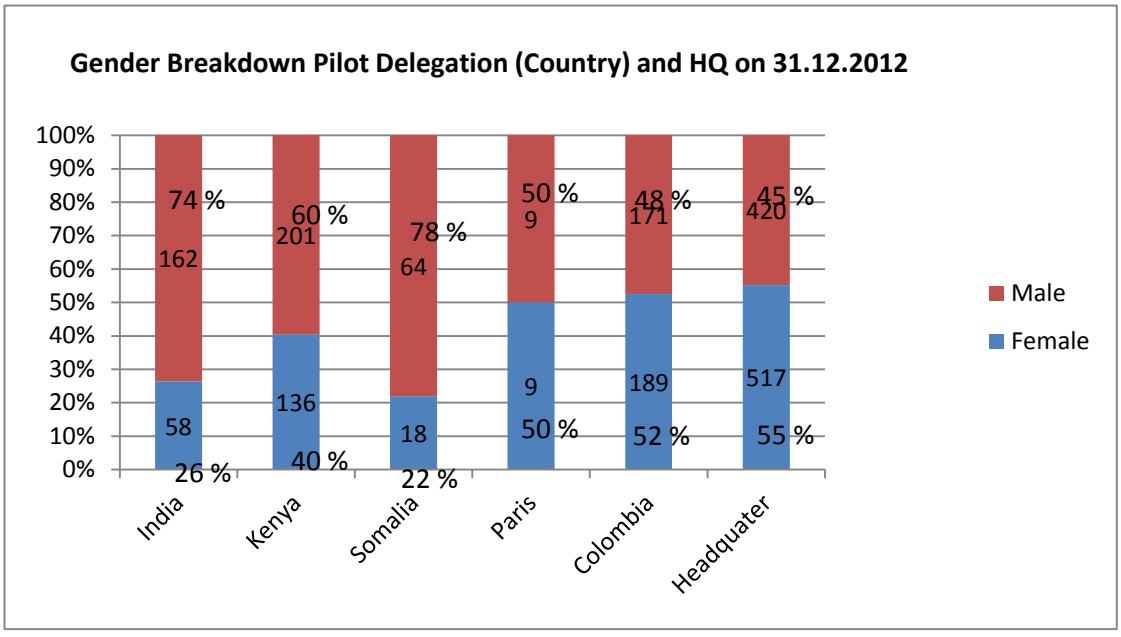
The figures represent the number and percentage of female/male staff members in each site as per December 31, 2012. These figures include all men and women either in the mobile or resident staff category.

SCOPE

Data are shown for the four pilot delegations (in addition of the Somalia Delegation) and HQ. Although the Somalia delegation is included with Kenya delegation for the construction of the sustainable development indicators, in this gender breakdown it is shown separately to highlight differences linked with the specific context. In the case of Paris, the staff of Paris delegation (5 persons) and Europe Delegation (13 persons) have been aggregated together to produce the gender breakdown data.

For this indicator, the staff of the entire delegation (main office, sub-delegation, offices) and HQ has been taken into consideration.

PERFORMANCE



Important note

Results among the different sites cannot be compared as such, as they operate in different contexts. They are placed in the same graph for illustrative purposes only.

OBSERVATIONS

- Gender balance is attained in Paris and relatively attained in Colombia and at HQ.
- The proportion of women working at the ICRC remains low in contexts like Somalia and India.

SOURCE OF DATA	PERIOD OF MEASUREMENT
ICRC, People Net, TRIA ONE Véronique Mathys, RH_DIR	Data as per 31.12.2012.

[23] For further information refer to the complete GRI guidelines at https://www.globalreporting.org/resourcelibrary/NGOSS-Complete.pdf

S1 B – GENDER BREAKDOWN BY MANAGERIAL POSITION PER DELEGATIONS AND HQ

RELEVANCE

The ICRC believes that gender balanced and sensitized teams at all levels are an added value favouring quality and effectiveness of its humanitarian responses. In 2006, the Directorate adopted a Gender Equality Policy and has set the target of at least 40% female representation at all level within the institution.[24]

This indicator shows the representation of men and women across managerial positions in the pilot delegations (adding Somalia) and HQ). It goes one step further from the indicator S1 A, which gave a general overview of the gender breakdown.

This is based on the GRI indicator 'LA 13: Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity (NGO Sector Supplement, Version 3.0).[25]

METHODOLOGY FOR DATA COLLECTION

The figures represent the number of men and women in each managerial position in the selected delegations and HQ.

As the ICRC uses a specific grading grid for its mobile and resident staff, the results are presented separately. The managerial positions have been grouped by grades to facilitate the overview of the situation as per 31.12.2012.

The category "Other" is to be understood as employees' position grade that are either outside the grading grid or are pending approval by HR.

SCOPE

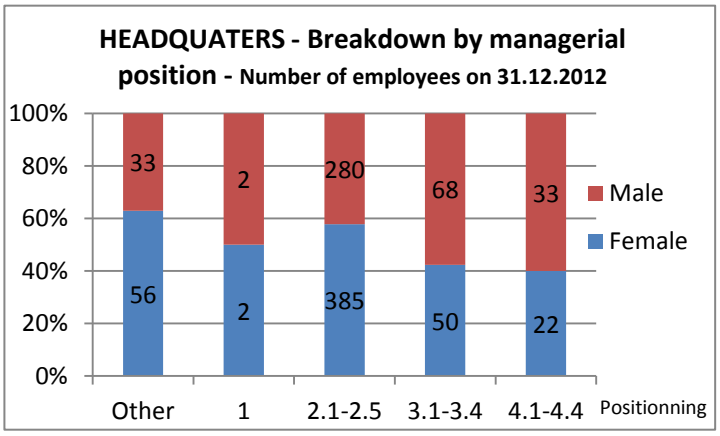
Data are shown for the three pilot delegations (in addition of Somalia Delegation) and HQ. Although Somalia delegation is included with Kenya delegation for the construction of the sustainable development indicators, in this gender analysis it is shown separately to highlight differences linked with the specific context.

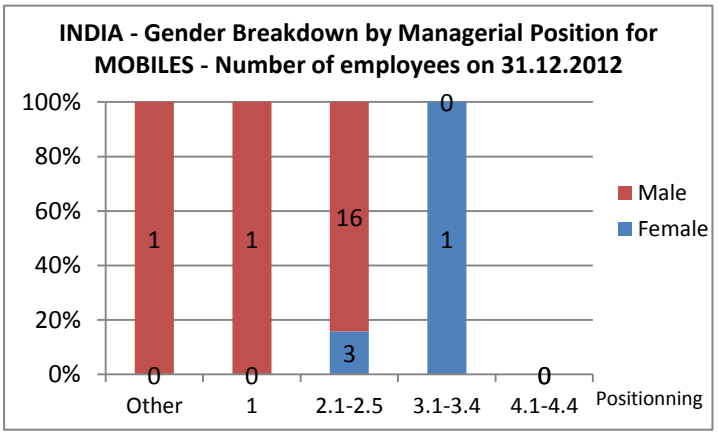
Paris delegation has not been included in this analysis given the small number of employees in the delegation.

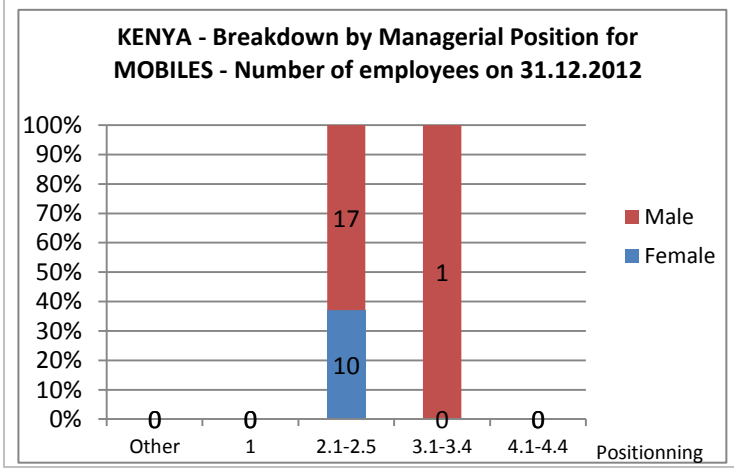
For this indicator, the staff of the entire delegation (main office, sub-delegation, offices) and HQ has been taken into consideration.

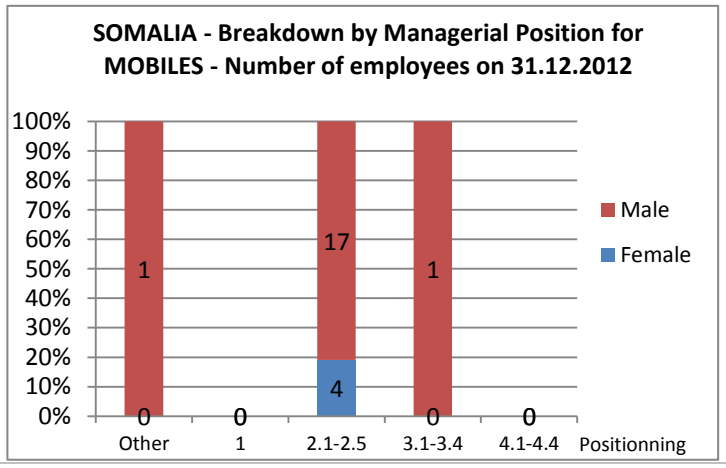
PERFORMANCE

MOBILES



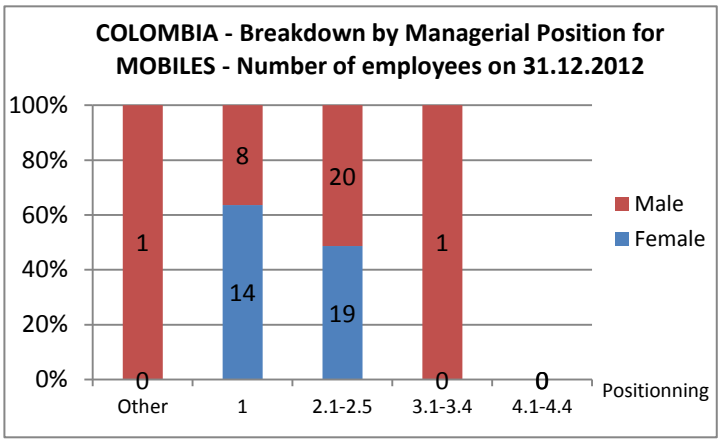




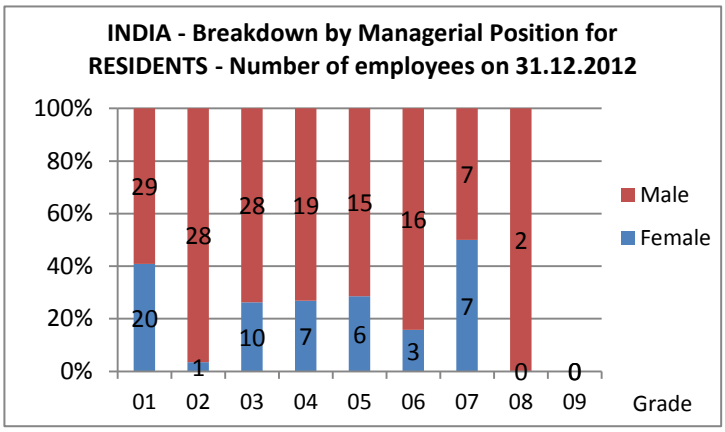


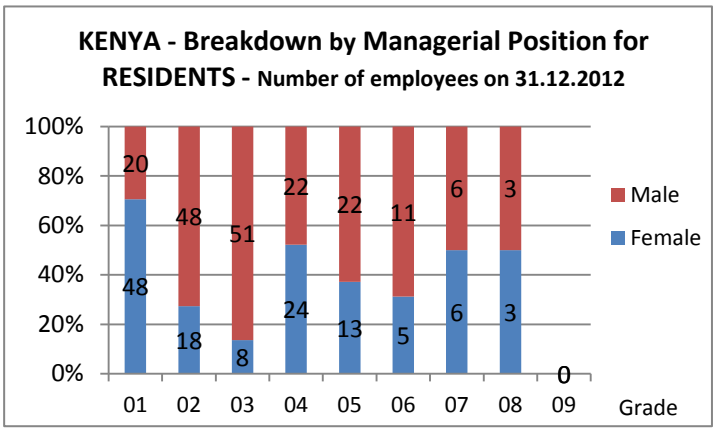
[24] Policy and Strategy Framework For Gender Equality At The ICRC, DIR 963, 2006

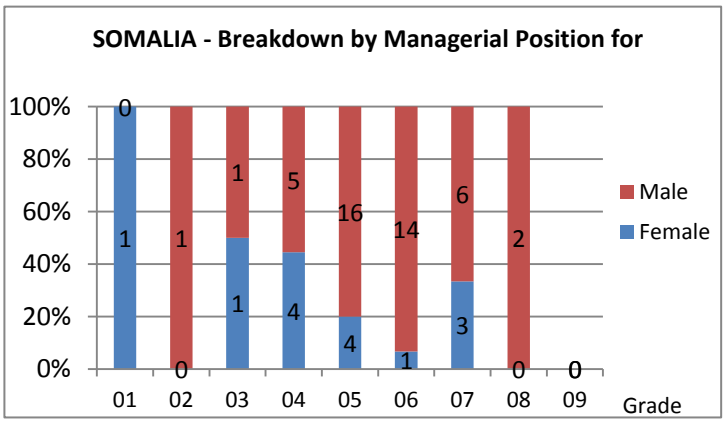
[25] For further information refer to the complete GRI guidelines at https://www.globalreporting.org/resourcelibrary/NGOSS-Complete.pdf

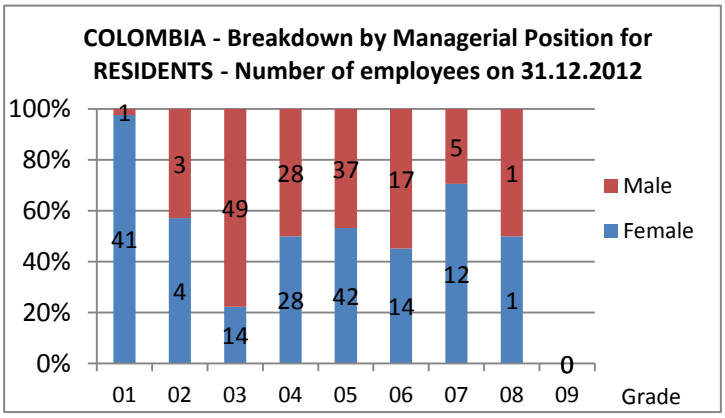


RESIDENTS









Important note

Results among the different sites cannot be compared as such, as they operate in different contexts. They are placed in the same graph for illustrative purposes only.

OBSERVATIONS

- In the mobile graph, the number of employees is low beyond managerial position grade 2 (For delegation, it is represented by the HOD position). Proportionately there are fewer women in higher managerial positions; there are also fewer employees in general.
- In the mobile graph, Somalia and India have similar trends of relatively small number of women in positions 1 and 2. In Colombia this proportion is reversed. This can be explained by the high number of first mission position in Colombia, with a significant number of women occupying these positions.
- For the resident group, clear trends are more difficult to identify. Differences in gender representation at the managerial level could be explained by specificities linked to the context (culture, security, etc.) and/or attributed to institutional dynamics. Further qualitative analysis is required.

SOURCE OF DATA	PERIOD OF MEASUREMENT
ICRC People Net Véronique Mathys, RH_DIR	Data as per 31.12.2012

Delegation Profiles and Summary of Results

NAIROBI AND SOMALIA

BACKGROUND INFORMATION

FAST FACTS

The delegations of Nairobi and Somalia are combined in the environmental analysis as the Somalia delegation is physically located in the premises of Nairobi.

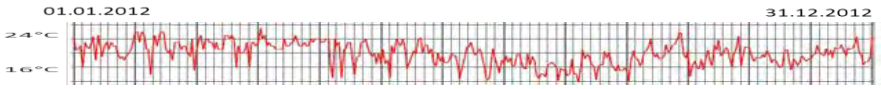
Open since: 1974 (Nairobi) and 1994 (when the Somalia delegation relocated to Nairobi.)

Number of staff: 200 (in both delegations) in 2012

Main activities in 2012: Promotion of IHL, operations in Kenya, Djibouti and Somalia, important logistical center for Somalia and the great Lakes region. **For Somalia:** emergency aid in Somalia, development of Somali Red Crescent Society.

TEMPERATURE AND CLIMATE

Temperature has an impact on energy consumption and has to be taken into account. Nairobi has a subtropical highland climate, and as it is close to the equator, differences between seasons are minimal.



From University of Dayton Climate Archive

THE PILOT PROJECT

The delegations of Nairobi and Somalia were asked to join the Pilot Project as they were already involved in several projects on the management of e-waste and garage waste. Since Nairobi and Somalia joined the project in 2012, a working group was formed of volunteers dedicated to improving the environmental performance of the delegation. With support from the headquarters, this group has conducted an initial assessment investigating the use of resources and waste management at the delegation, and has started several practical projects designed to reduce their environmental impact.

WORKING GROUP

**Not all members of the working group are on the photo above*

PROJECTS CURRENTLY UNDERWAY

- Recycling of used motor vehicle tire waste via a partnership with Bamburi Cement Factory which is part of the Lafarge Group.
- Harvesting of rain water at the delegation for use in the lavatories.
- Systematic reduction of paper printing and eventual elimination in some departments such as in LON non-medical Log-desk.
- Making use of Kitengela Glass Company in engine oil recycling.
- Internship soon to follow, for environmental university students to assist in establishing local solutions to environmental sustainability.

DELEGATION PREMISES

Building type: different rented buildings in a compound

Surface area of the building (walls included): 3267 m²

Surface of green areas: 6900 m²

Electricity from city network: 20h/day

Generator : 1x 150 KVA

Use of heating: yes.

Use of air conditioning: yes

WASTE MANAGEMENT AT THE DELEGATION

A survey was made to find out how waste is handled in Nairobi and Somalia. The results are summarized in the table below.

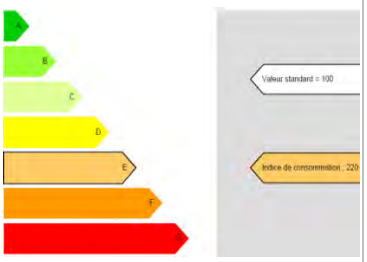
Type of waste	1	2	3	4
Paper			x	
Batteries	x			
Electric and electronic devices	x			
Toner and printer cartridges	x			
Plastic			x	
Glass			x	
Aluminum	N/A			
Organic waste	N/A			

1-Official recycling channel
2-Unofficial recycling channel
3- Stored
4-Not recycled.

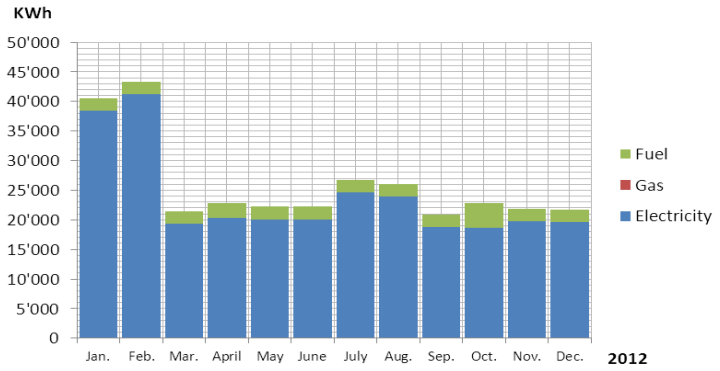
SUMMARY OF RESULTS OF ENVIRONMENTAL INDICATORS

E1: ENERGY

Energy certificate

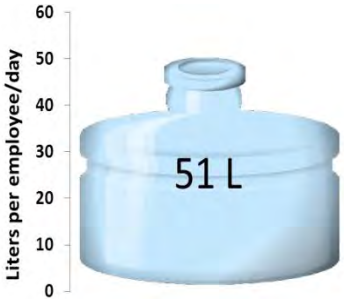


HOW IS THE ENERGY CERTIFICATE CALCULATED?

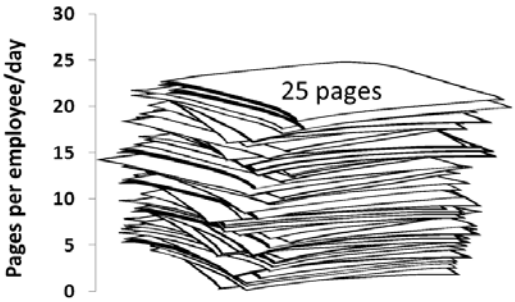


The various types of energy consumed (gas, fuel oil, electricity) are weighted by their primary energy factor and added to obtain total consumption, which is compared with the energy reference area. The result is used to calculate the Energy certificate[26].

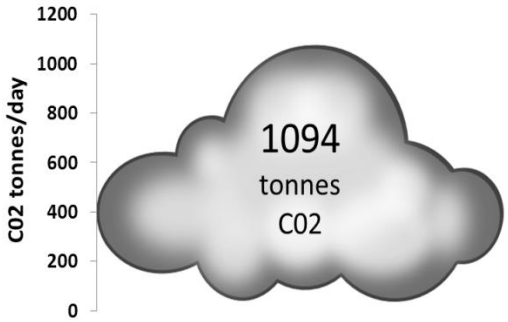
E2: WATER CONSUMPTION



E3: PAPER CONSUMPTION



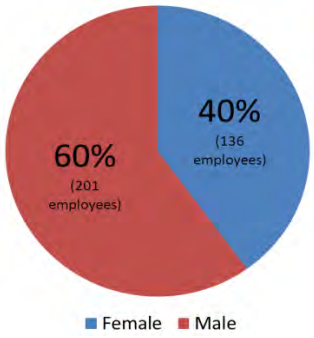
E4: C02 FROM VEHICLES AND GENERATORS



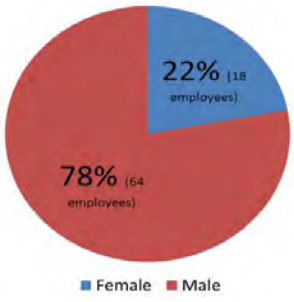
SUMMARY OF SOCIAL INDICATORS

S1 A: OVERALL GENDER BALANCE

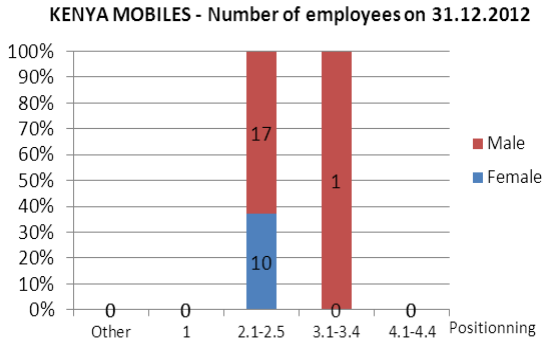
Kenya

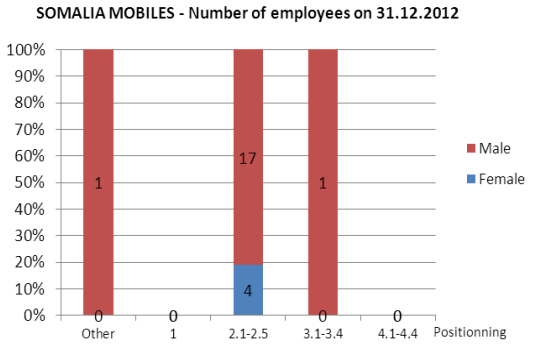


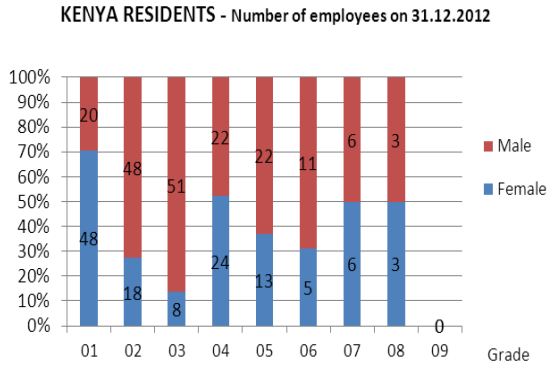
Somalia

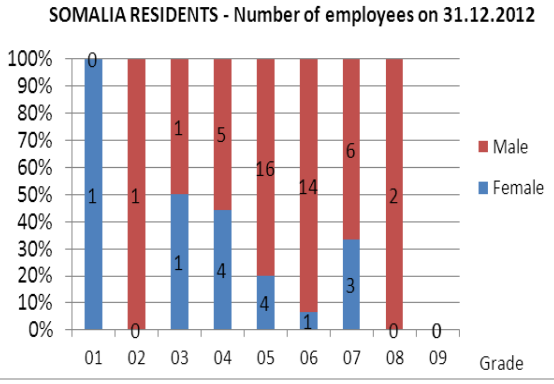


S1 B: GENDER BREAKDOWN BY MANAGERIAL POSITION





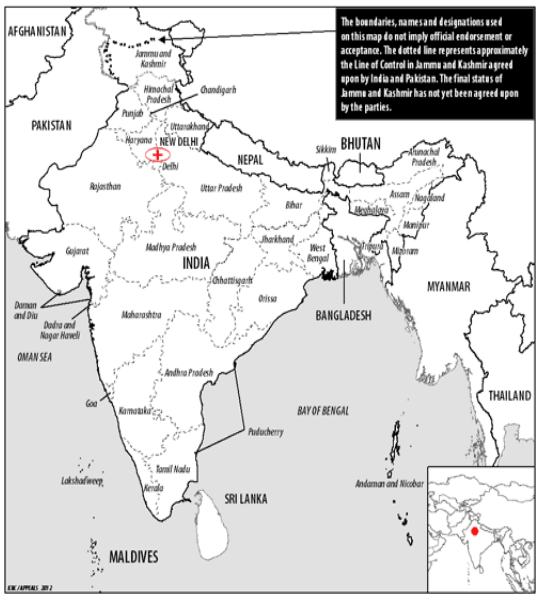




[26] See Energostat document in Annex

NEW DEHLI

BACKGROUND INFORMATION



FAST FACTS

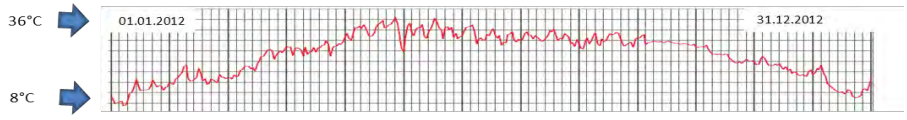
Open since: 1982

Number of staff: 84

Main activities in 2012: Visiting detainees, promotion of IHL, supporting regional development of Red Cross and Red Crescent societies.

TEMPERATURE AND CLIMATE

Temperature has an impact on energy consumption and has to be taken into account. New Delhi has a humid sub-tropical climate, with a large difference between summer and winter. The average temperature ranges between 8 and 38°C.



From University of Dayton Climate Archive

THE PILOT PROJECT

The New Delhi delegation was invited to join the Pilot Project as it has a key role to play in the ICRC regarding logistics and conducting supplier assessments. Since New Delhi joined the project in 2012, a working group was formed of volunteers dedicated to improving the environmental performance of the delegation. With support from the headquarters, this group has conducted an initial assessment investigating the use of resources and waste management at the delegation, and has started several practical projects designed to reduce their environmental impact.

INDIA SPIRIT

**Photo of the Taj Mahal in the absence of a group photo*

PROJECTS CURRENTLY UNDERWAY

- One of the first in the country to use 'HP Recycles Your Cartridges' program. 150 Cartridges given as first lot.
- Efficient use of electricity. Cost efficient lighting promoted.
- Switching off of electrical equipment when not in use promoted.
- Saving water and paper awareness created.

DELEGATION PREMISES

Building type: One building.

Surface area of the building (walls included): 1487 m²

Surface of green areas: 67m2

Electricity from city network: 20h/day

Generator : 1x 220 KVA

Use of heating: yes.

Use of air conditioning: yes.

WASTE MANAGEMENT AT THE DELEGATION

A survey was made to find out how waste is handled in New Delhi. The results are summarized in the table below.

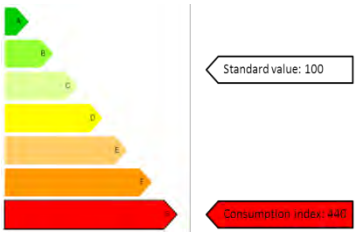
Type of waste	1	2	3	4
Paper		x		
Batteries		x		
Electric and electronic devices		x		
Toner and printer cartridges		x		
Plastic		x		
Glass		x		
Aluminum		x		
Organic waste	NA			

1-Official recycling channel
2-Unofficial recycling channel
3- Stored
4-Not recycled.

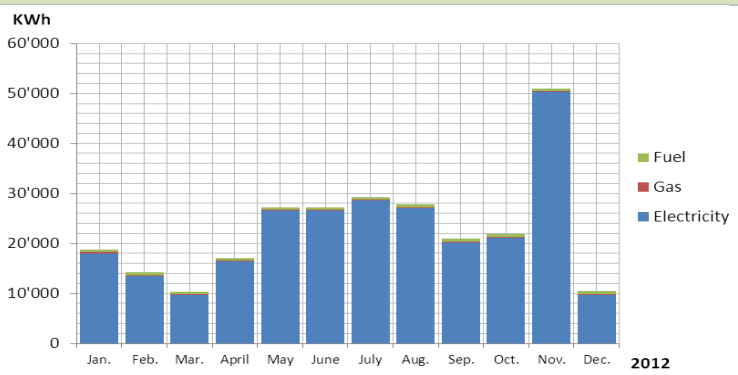
SUMMARY OF RESULTS OF ENVIRONMENTAL INDICATORS

E1: ENERGY

Energy certificate

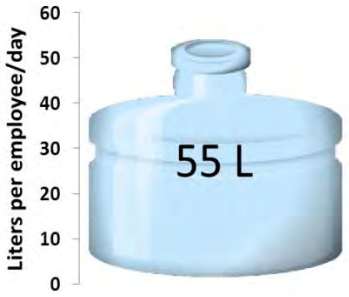


HOW IS THE ENERGY CERTIFICATE CALCULATED?



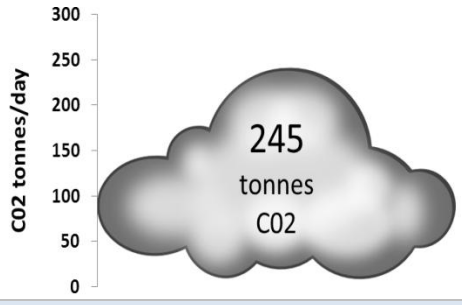
The various types of energy consumed (gas, fuel oil, electricity) are weighted by their primary energy factor and added to obtain total consumption, which is compared with the energy reference area. The result is used to calculate the Energy certificate[27].

E2: WATER CONSUMPTION



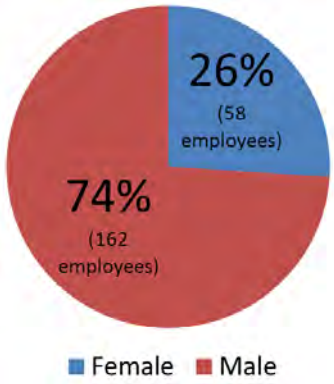
E3: PAPER CONSUMPTION

E4: C02 FROM VEHICLES AND GENERATORS

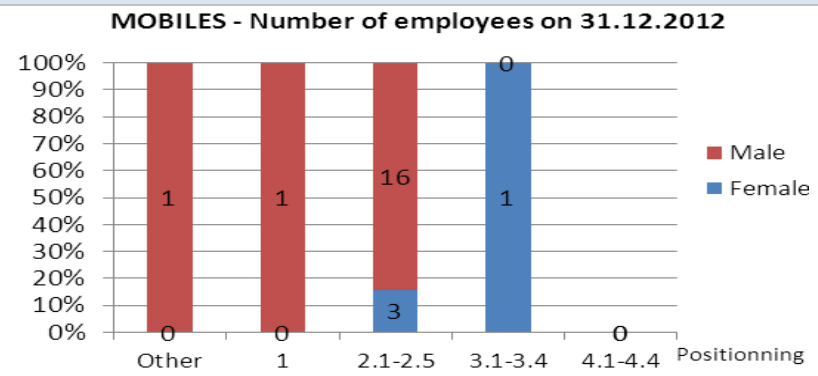


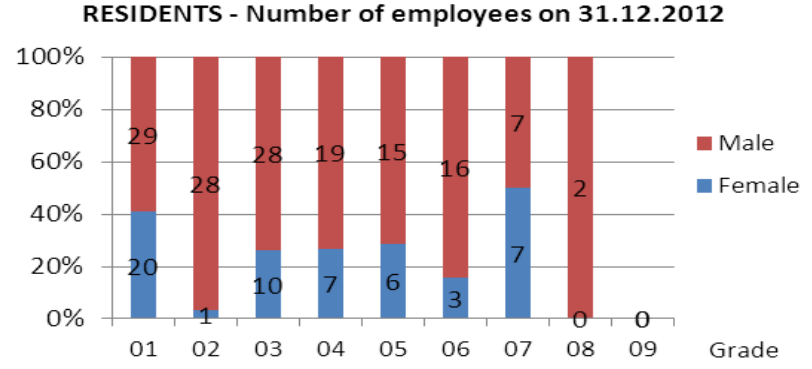
SUMMARY OF SOCIAL INDICATORS

S1 A: OVERALL GENDER BALANCE



S1 B: GENDER BREAKDOWN BY MANAGERIAL POSITION





[27] See Energostat document in Annex

BOGOTA

BACKGROUND INFORMATION

FAST FACTS

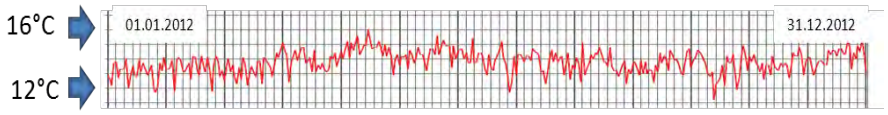
Open since: 1969

Number of staff: 95

Main activities in 2012: Promotion of IHL, visiting security detainees, assistance to IDPs and conflict-affected residents, mine action program.

TEMPERATURE AND CLIMATE

Temperature has an impact on energy consumption and has to take into account. The climate in Bogota is moderate temperate, which varies very little. The average temperature ranges between 11 and 16°C.



From University of Dayton Climate Archive

THE PILOT PROJECT

The Bogota delegation has proven so far particularly creative in finding concrete solutions for an optimal use of energy and natural resources. The delegation was thus included in the Pilot Project to share its good practices. Since Bogota joined the project in 2012, a working group was formed of volunteers dedicated to improving the environmental performance of the delegation. With support from the headquarters, this group has conducted an initial assessment investigating the use of resources and waste management at the delegation, and has started several practical projects designed to reduce their environmental impact.

WORKING GROUP

**Not all members of the working group are on the photo*

PROJECTS CURRENTLY UNDERWAY

- All the materials are separated in the delegation and given to a recycling association that works with vulnerable people. The covers of the plastic bottles for example are separated and given to a foundation that collects funds by selling this material in order to help children with cancer.
- Change of all the bulbs in the delegation and ICRC houses for energy saving light bulbs.
- Using biodegradable cups instead of disposable
- Water saving faucets in all the sinks of the delegation
- Awareness campaign to all the ICRC employees to avoid paper waste and the 3R concept (reduce, recycle, reuse)
- Replacing small plastic sugar bags by a recipient with sugar (to use with spoon)
- Using A4 paper made of the waste of sugar cane.

DELEGATION PREMISES

Building type: different buildings in a compound

Surface area of the building: 1408 m²

Surface of the garden: 220 m²

Electricity from city network: 24h/day

Generator : 1x75 KVA

Use of heating: yes.

Use of air conditioning: no.

WASTE MANAGEMENT AT THE DELEGATION

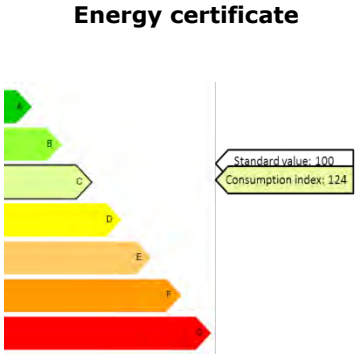
A survey was made to find out how waste is handled in Bogota. The results are summarized in the table below.

Type of waste	1	2	3	4
Paper		x		
Batteries	x			
Electric and electronic devices	x			
Toner and printer cartridges	X			
Plastic		x		
Glass		x		
Aluminum		x		
Organic waste				x

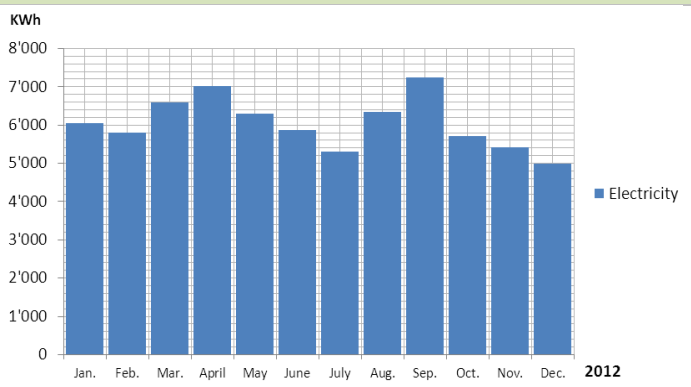
1-Official recycling channel
2-Unofficial recycling channel
3- Stored
4-Not recycled.

SUMMARY OF RESULTS OF ENVIRONMENTAL INDICATORS

E1: ENERGY



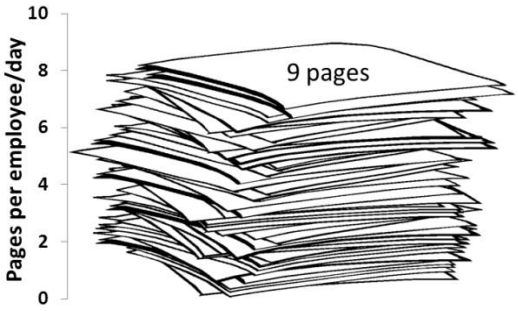
HOW IS THE ENERGY CERTIFICATE CALCULATED?



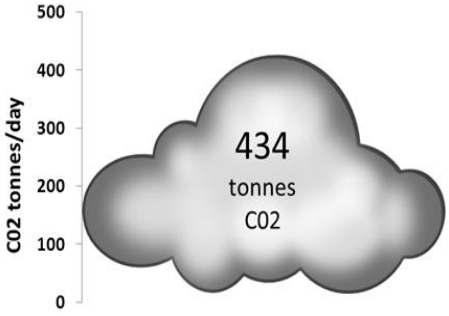
The various types of energy consumed (gas, fuel oil, electricity) are weighted by their primary energy factor and added to obtain total consumption, which is compared with the energy reference area. The result is used to calculate the Energy certificate[28].

E2: WATER CONSUMPTION

E3: PAPER CONSUMPTION

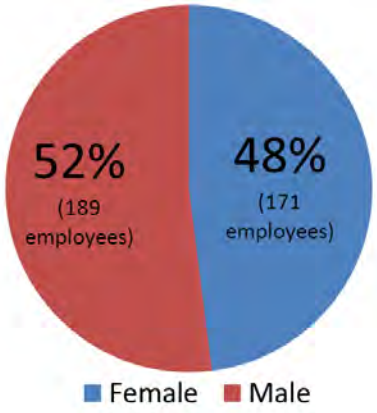


E4: C02 FROM VEHICLES AND GENERATORS

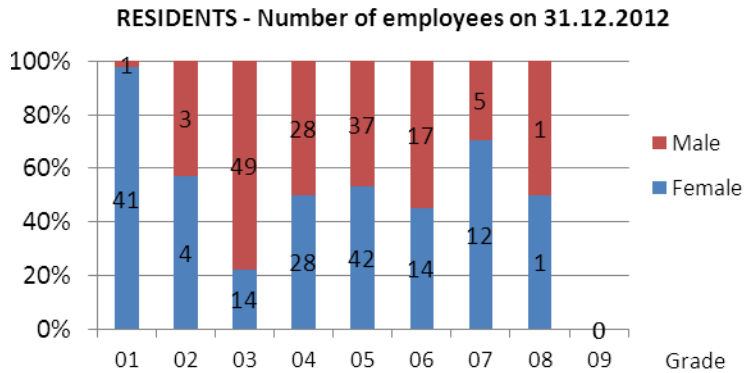


SUMMARY OF SOCIAL INDICATORS

S1 A: OVERALL GENDER BALANCE



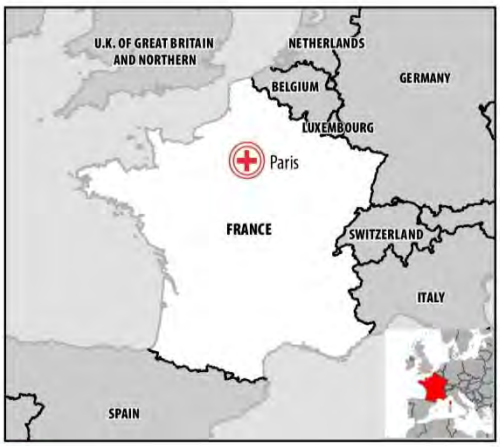
S1 B: GENDER BREAKDOWN BY MANAGERIAL POSITION



[28] See Energostat document in Annex

PARIS

BACKGROUND INFORMATION



FAST FACTS

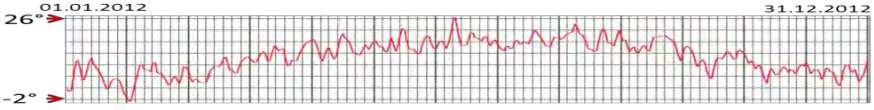
Open since: 2000

Number of staff: 18 in 2012 (5 working for the Paris delegation, 13 for the Europe delegation.)

Main activities in 2012: Promotion of IHL, humanitarian diplomacy, facilitating ICRC activities in the field.

TEMPERATURE AND CLIMATE

Temperature has an impact on energy consumption and has to be taken into account. Paris has a western European oceanic climate, which is mild and moderately wet.



From University of Dayton Climate Archive

THE PILOT PROJECT

Paris was already known for having taken some measures linked to sustainable development before joining the Pilot Project. Since Paris joined the project in 2012, a working group was formed of volunteers dedicated to improving the environmental performance of the delegation. With support from the headquarters, this group has conducted an initial assessment investigating the use of resources and waste management at the delegation, and has started several practical projects designed to reduce their environmental impact.

WORKING GROUP

**Not all members of the working group are on the photo*

PROJECTS CURRENTLY UNDERWAY

- Waste management and recycling: information campaign launched to inform employees of the importance of collecting and sorting waste produced in the office; 'go live' meeting, display board and set-up of an appropriate garbage place.
- Quality of the energy: contract with an electricity cooperative promoting use of renewable energy by having direct link with "green" energy producers.
- Communication of the document "des gestes simples pour un CICR exemplaire" through noticeboards and meetings.
- Buying equipment/resources: for all tender: a questionnaire requesting information on sustainable development policy of the bidder.
- Partnership and regular meetings with a group of humanitarian actors (including the French Red Cross) implementing a sustainable development project.

DELEGATION PREMISES

Building type: different apartments in a building

Surface area of the building (walls included): 440 m²

Surface of green areas: none

Electricity from city network: 24h/day

Generator : none

Use of heating: yes.

Use of air conditioning: no.

WASTE MANAGEMENT AT THE DELEGATION

A survey was made to find out how waste is handled in Paris. The results are summarized in the table below.

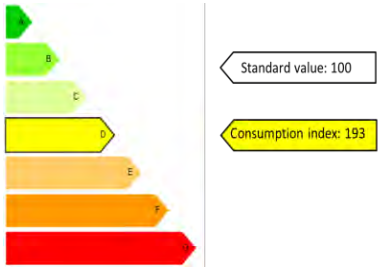
Type of waste	1	2	3	4
Paper	x			
Batteries	N/A			
Electric and electronic devices		x		
Toner and printer cartridges		x		
Plastic	x			
Glass	x			
Aluminum	N/A			
Organic waste	x			

1-Official recycling channel
2-Unofficial recycling channel
3- Stored
4-Not recycled.

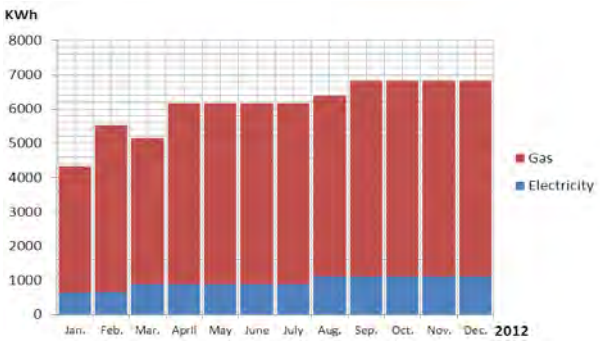
SUMMARY OF RESULTS OF ENVIRONMENTAL INDICATORS

E1: ENERGY

Energy certificate



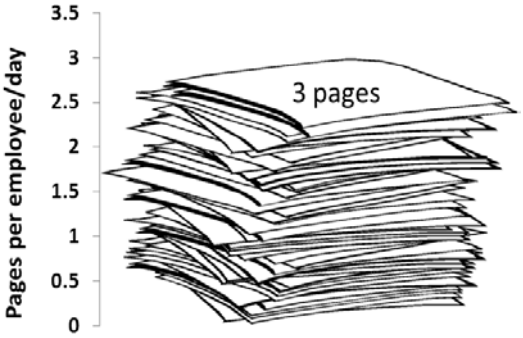
HOW IS THE ENERGY CERTIFICATE CALCULATED?



The various types of energy consumed (gas, fuel oil, electricity) are weighted by their primary energy factor and added to obtain total consumption, which is compared with the energy reference area. The result is used to calculate the Energy certificate[29].

E2: WATER CONSUMPTION

E3: PAPER CONSUMPTION

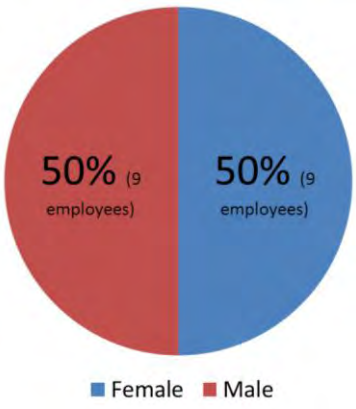


E4: C02 FROM VEHICLES AND GENERATORS

Not applicable to Paris.

SUMMARY OF SOCIAL INDICATORS

S1 a: OVERALL GENDER BALANCE



*The breakdown by managerial position is not provided as the number of employees is too small to be statistically significant in this regard.

[29] See Energostat document in Annex

HEADQUARTERS

BACKGROUND INFORMATION

ICRC Headquarters

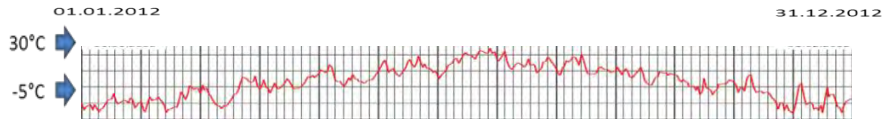
FAST FACTS

Open since: 1933

Number of staff: total of 948 in 2012 (Satigny = 64 / Ecogia = 3 / siège = 881)

TEMPERATURE AND CLIMATE

The climate of Geneva is temperate oceanic. Winters are mild, usually with light frosts at night and thawing conditions during the day, and summers are warm.



From University of Dayton Climate Archive

SUPPORT TO THE PILOT PROJECT

The support consists of the Sustainable development team[30], responsible for implementing this framework throughout the organization. They answer the requests from the field, put in place the tools to manage and organize all the data, report regularly on the indicators and support the staff in the field implementing sustainable development principles while keeping on developing external partnerships.

WORKING GROUP

PROJECTS CURRENTLY UNDERWAY

- Maintenance of new website launched early in 2013 to the whole of the ICRC staff in order to share the many projects and best practices that have been put in place at the ICRC related to sustainable development.
- Measuring the impact of some of the products distributed to beneficiaries, using a life cycle analysis tool, in collaboration with an external company.
- Developing external partnerships in the area of technical development where the organization lacks the necessary know-how; for handling waste, using adequate material and managing all issues concerning energy.
- Participation in seminars, conferences, and discussions on sustainable development issues in ICRC, and with UN actors, humanitarian organisations and donors.

**Not all members of the working group are on the photo on the left*

DELEGATION PREMISES

Building type: different rented buildings in a compound

Surface area of the building (walls included): 42'000 m²

Electricity from city network: 24h/day

Generator : 1x 150 KVA

Use of heating: yes.

Use of air conditioning: yes.

WASTE MANAGEMENT AT THE DELEGATION

A survey was made to find out how waste is handled in Geneva. The results are summarized in the table below.

Type of waste	1	2	3	4
Paper	x			
Batteries	x			
Electric and electronic devices	x			
Toner and printer cartridges	x			
Plastic	x			
Glass	x			
Aluminum	x			
Organic waste	x			

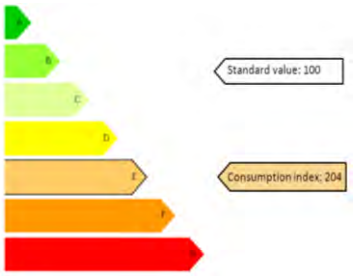
1-Official recycling channel
2-Unofficial recycling channel
3- Stored
4-Not recycled.

[30] Composed of one environmental & sustainable development advisor, the advisor for gender equality, one intern and a group of volunteers with expertise from different domains as a sounding board

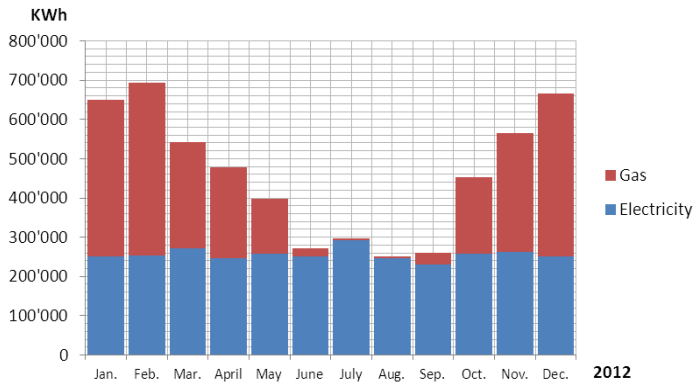
SUMMARY OF RESULTS OF ENVIRONMENTAL INDICATORS

E1: ENERGY

Energy certificate

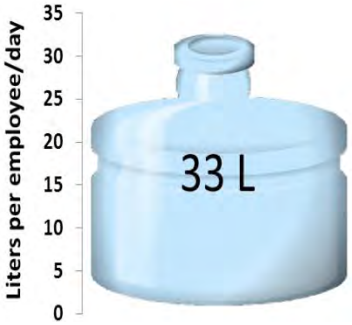


HOW IS THE ENERGY CERTIFICATE CALCULATED?

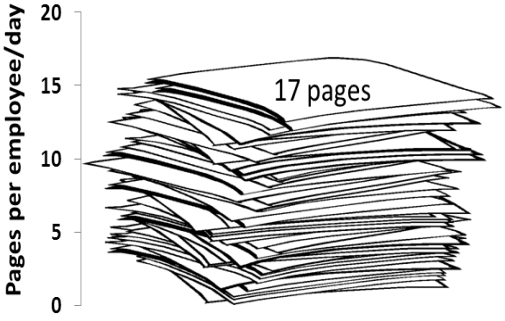


The various types of energy consumed (gas, fuel oil, electricity) are weighted by their primary energy factor and added to obtain total consumption, which is compared with the energy reference area. The result is used to calculate the Energy certificate[31].

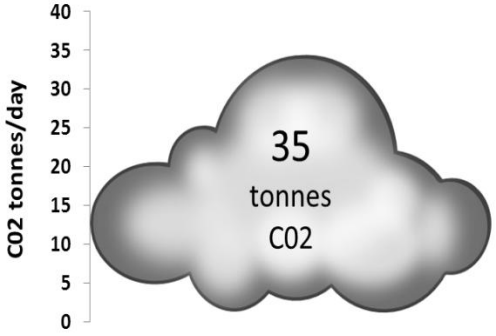
E2: WATER CONSUMPTION



E3: PAPER CONSUMPTION

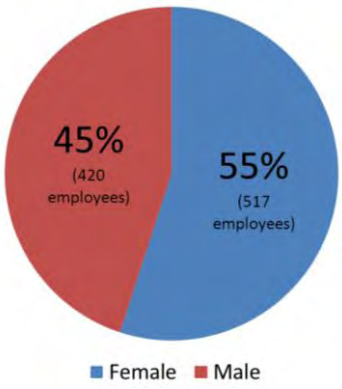


E4: C02 FROM VEHICLES AND GENERATORS

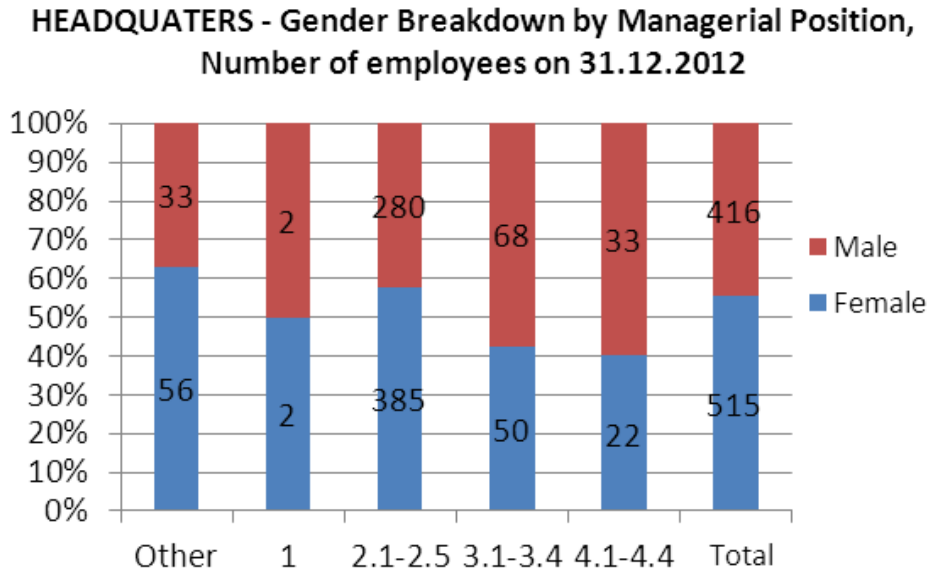


SUMMARY OF SOCIAL INDICATORS

S1 A: OVERALL GENDER BALANCE



S1 B: GENDER BREAKDOWN BY MANAGERIAL POSITION



[31] See Energostat document in Annex

Chapter 2: Initiatives and innovations in favour of sustainable development

Initiatives and innovations in favor of sustainable development[32]

The following section describes some initiatives that have been taken in the interest of sustainable development throughout the organization, that merit some detailed explanation. They have the potential to decrease the ICRC's impact on the environment, which also bring social and economic advantages. Some of these initiatives are quite innovative in their fields, especially in a humanitarian organization. They make use of new technologies and research, highlighting the importance of forming external partnerships with universities and external firms in order to obtain technical knowledge where needed.

Some of these initiatives have been started several years ago, and are still under development and deployment. For example, the solar water heating system established in Amman was successfully tested already in 2009, but has not yet been installed in other contexts. The consistent development and implementation of these techniques is thus a long term process, the main challenge is to use them on a regular basis and to avoid losing the know-how acquired. Large scale diffusion is necessary in order to implement these techniques more widely in the organization.

Many of these initiatives have been developed to support the implementation of the Framework for Environmental Management in Assistance Programs (FEMAP). This document gives practical guidance to assistance delegates and national staff about certain 'do's and don'ts' in the field regarding environmental management.[33]

Framework objective 1:	Framework objective 2:	Framework objective 6:	Framework objective 7:
Reducing the potential impact of environmental degradation and climate change on victims of violence	Controlling the environmental footprint of ICRC operational and support activities	The ICRC's staff members adhere to the idea of sustainable development and put it into practice in their work.	Implementing the principles of sustainable development makes a concrete contribution to the ICRC's general partnership objective.

[32] Many institution-wide systems and policies, such as those related to the management of human or financial resources, are related to sustainable development but are not explored here. For a full list of the projects and systems related to sustainable development at the ICRC see the mapping in Chapter 3.

[33] https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents%20de%20rfrences/Environment-Beneficiaries-%20Framework%20for%20environmental%20assistance%20programme%20EN.pdf

2.1 RESOURCES AND WASTE MANAGEMENT

2.1.1 Management of resources

Example 1: Biogas in prisons

Poor sanitation can have a big impact on the health status of people, especially in places where people have been deprived of their freedom. To address this problem, thirteen biogas systems have been constructed in eleven prisons in Rwanda (in 2009), Nepal (in 2009) and the Philippines (in 2011/2012). These have been built in partnership with local firms and technical institutes, such as the Kigali Institute of Science and Technology (KIST) and EREP SA in the case of Rwanda, the Biogas Sector Partnership Nepal (BSP-N) for Nepal, and Practical Action Consulting in the case of the Philippines. The systems were assessed in a study using sustainable development criteria (technical performance, economic viability, environmental impacts and social acceptance of the implemented systems). The study concluded that biogas systems are a good substitute for undersized and deteriorating septic tanks and hereby improve the sanitary conditions, reducing the health risks for the detainees and provide a renewable and smoke-free source of cooking fuel.[34]

The next step

While the benefits of biogas have been demonstrated, the design, construction and maintenance of such systems are still a challenge and cannot be undertaken without careful study beforehand. Many factors should be taken into account before such a system can be built; such as climate conditions in the country concerned, social acceptance, the mastering of the technology involved and maintenance issues. Therefore, the support of the WatHab unit and Sandec/Eawag[35], a Swiss research institute specializing in water and sanitation solutions in developing countries is crucial when such system is build.

Example 2: Solar water heating

In 2012, solar water heating was used in Amman and in three prisons of the Philippines with very positive results. The benefits of solar water heating are considerable as long as local operation and maintenance are secured over time. By using the sun's energy, the energy (from conventional sources) consumption needed to heat water is remarkably reduced. It

[34] A manual for biogas systems has been published. See 'Biogas systems in prisons: a state of practices review'. https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents%20de%20rfrences/biogasreview2012.pdf
[35] http://www.sandec.ch/index_EN

does not only cut energy costs but, as the sun replaces hydrocarbon fuel, it minimizes negative impacts on the environment by reducing carbon emissions and pollution. It should be noted that, depending on location and cost, more ICRC premises could be equipped with such devices as long as, from a financial and environmental perspective, it remains a viable option. In Amman, considering that each solar system costs less than 800 CHF, the initial investment was paid in approximately one year. In two years the diesel consumption was reduced by 37% in twenty-one residences, representing approximately 38,000 liters of fuel.

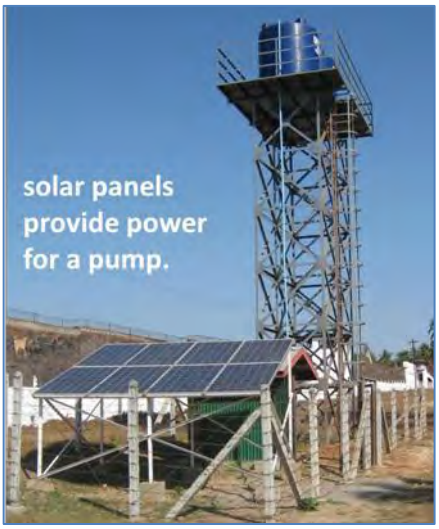
This technology was continued in 2012 in three prisons in the Philippines in order to pre-heat the water used for cooking (the cooking itself is done with gas from a biogas system.). The system was put in place due to the new enforcement of the 'Clean Air Act Decree' which forbids cooking with firewood in an effort to reduce pollution. Although most people had already started to use liquid petroleum gas (LPG), this fuel was too expensive for the prison authorities, while the solar water heating and biogas combination was much more feasible economically. [36] As this example shows, in many cases, simple but effective technology is often the most appropriate for beneficiaries, who are usually among the most vulnerable and economically poorest members of society.

The next step

Based on the positive experiences in Amman and the Philippines, this technology should be implemented more widely, where feasible. In order to provide support to the delegations that would like to install the solar panels, the Sustainable Development Team has contact with two companies, who can help with feasibility studies, validation of technical choices and advice on the way to install these systems in practice.[37]

Example 3: Solar Water pumping

In 2012, three prisons in Myanmar were equipped with solar photovoltaic panels which exploit renewable solar energy to power a water pump. The pump lifts the water to a water tower reservoir which is connected to the water distribution network.



This technology has also been used successfully in Eritrea, a particular context where hardly any fuel exists on the market and only at very high price due to importation restrictions. In 2012, ICRC started maintenance work on numerous solar pumping schemes.

The next step

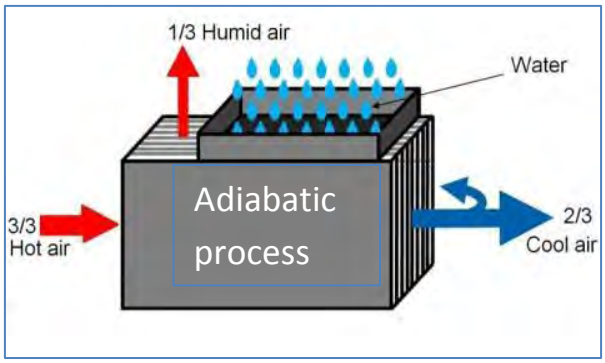
This system –solar photovoltaic panels for water pumping- is very cost-effective and a reliable solution. Concrete projects using this technology should be well documented and promoted as a best practice in the FEMAP.

[36] See https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents/ICRC%20Solar%20Water%20Heating%20Systems%20ManualC.pdf
[37] See http://www.archiwatt.ch/_home/page_01.htm
and http://www.eben-energie.ch/

Example 4: the possibility of adiabatic cooling systems in warehouses

In late 2012, the ICRC started investigating the possibility of installing adiabatic cooling systems in warehouses. Some feasibility studies are on the way to determine where these systems could be installed.

Adiabatic cooling systems, or evaporative cooling systems, are an alternative to traditional air-conditioning. They can be installed under certain climatic conditions.



If possible to install, the system poses many advantages. The air is cooled through evaporation, using no refrigerant gases and using up to 10 times less electricity than a conventional air-conditioning system.

2.1.2 Management of hazardous waste

Why is hazardous waste treatment important?

If hazardous waste is not processed in a suitable manner, not only does the environment suffer (through ground water, air and soil pollution) but human health is also affected (such as through lead poisoning, or waterborne diseases.)

In most of the countries where the ICRC is active, there are no facilities for treating hazardous and non-hazardous waste, so alternative solutions must be found. This often necessitates outside expertise and dedicated infrastructure for the recycling of this kind of waste.

Example 1: E-waste treatment with Hewlett Packard (HP)

In 2012, in partnership with HP, four tons of e-waste from Nairobi was sent to a treatment plant in Mombasa, where the appropriate techniques for recycling exist.[38]

[38] This factory has since been shut down, but another one is planned to be opened in Nairobi in the near future.

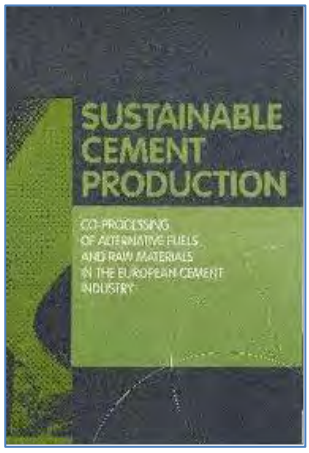
Example 2: Peat sorb

In Amman, the ICRC is testing the use of peat sorb as a possible solution to managing oil waste in garages. Peat sorb has two advantages. Firstly, it is hydrophobic and does not mix with water; meaning that there is no risk that groundwater is contaminated by the oil. Secondly, it encases the hydrocarbons in oil, storing it in a safe way until bacteria degrades the toxic matter naturally.

Techniques that use peat sorb are controversial as the peat itself is a valuable resource as a carbon store and takes millions of years to form. However, the level of peat is continually renewing itself, and of the 70 million tones that are produced by natural processes every year, only 0.02% of the uppermost layer is extracted. The peat sorb that is used for this test is cultivated under the supervision of the ministry of environment of Canada, making sure that the amount cultivated is kept at sustainable levels[39].

This shows that sometimes, in solving waste management problems, it is necessary to use a 'less bad' solution. In this case small amounts of a valuable resource are used, to decompose dangerous toxins which would otherwise spill into the groundwater systems. In isolated areas far from recycling infrastructure, this could be the best alternative.

Example 3: Co-processing in Nairobi



Co-processing was validated in Lafarge's Bamburi plant in Mombasa in November 2012. The ICRC can supply their old tires and dangerous liquids to the factory, which will be used through co-processing techniques, to make cement.

Co-processing is the use of waste as raw material, or as a source of energy for manufacturing processes, usually in energy-intensive industries such as cement, or steel production. It presents a series of environmental benefits linked on one hand to the reduction of the environmental impact of the manufacturing process and on the other hand to its contribution to sound waste management solutions. However, this technique should only be used in certain factories, where proper air filtering systems are in place.

[39] See http://jdchollet.ch/quest-ce-que-naturesorb/

2.2 SUPPLY CHAIN MANAGEMENT

The supply chain has a visible impact on the three domains of environment, social and economic. For years the logistical division has studied the way to mitigate negative impacts. These are some examples of initiatives that have been taken.

2.2.1 Fleet

Vehicles and generators

In 2012, the ICRC used around 2960 vehicles and trucks to conduct its operations. Furthermore, 1293 generators were used to produce 43,535,000 kWh of electricity. To run this equipment, 40 million liters of fuel was needed (12t of C02), of which approximately 8.7 million liters was used for the generators only.

Several policies outlined below have been put in place to manage the fleet more effectively, with the result of improving efficiency (thereby reducing costs and C02 production) and safety. While the use of generators has a significant environmental impact in terms of C02 production, it remains the most reliable solution for energy production in many of the countries where the ICRC operates. Therefore, concerning the generators, the best approach is to decrease energy consumption by using more efficient systems for lighting, air-conditioning and heating.

Example 1: Improved tracking of vehicles

In 2012, computerized vehicle follow-up was continued which has been used in the institution for many years already in order to optimize the use of vehicles. An e-logbook currently helps logisticians to better control the movement of vehicles but also to correct inadequate driving attitudes. To improve further, a satellite tracking system has been developed, the deployment of which is under discussion between different departments.

Example 2: Fleet Safety project

The decision was made in the PfR of 2012 to start a Fleet Safety project. By the end of 2013, a sustainable policy aimed at limiting risks of damages related to road movements will be implemented. By actively improving the processes before the accident, the ICRC aims to reduce the amount of accidents by 25% and the risk of accidents by 75% in 3 years. A fleet safety manager will start working in the summer of 2013 to supervise the project.

2.2.2 Improving the quality and sustainability of products distributed and used by the ICRC

Example 1: Reducing the environmental impact of products distributed

In 2012, all plastic bags used for wrapping individual blankets and tarpaulins were abandoned. Now the goods come in bales ready for distribution. In numbers, this saves more than 1 million pieces of suppressed plastic bags. The same applies for Long Lasting Insecticidal Nets which are wrapped in bulk. Another element of preserving water and environment is the choice of not using dying agents in the blanket production: by mixing black and white fibres, grey blankets are obtained which do not require any dying process, hence shortening the manufacturing process, reducing the environmental impact and the cost.

Example 2: Quality control systems

Logistics are developing Quality Control systems at receiving point. In 2012, a quality control laboratory was built in Geneva in order to control the quality of some of major household items procured. Other quality control units have already been completed in Nairobi, Amman and Abidjan and staff trained according to International standards. A 'Quality Handbook' will be released for users at the end of 2013.


Sleeping mat manufacturing

Example 3: ICRC Ethical purchasing policy

The ICRC code of conduct for purchasing strives to ensure the ICRC highest ethical standards and ethical standards from our suppliers too. Each person undertaking any purchasing activity in the ICRC signs this document.

The ICRC Ethical Purchasing policy is being implemented. Criteria on working conditions, hygiene and security, safety, child labour, and environmental concerns are assessed in the manufacturing units for major essential household items manufactured in low cost countries. In 2012, 62 factory assessments (out of 333 identified) were carried out for kitchen sets, buckets, foldable jerry cans, mosquito nets and sleeping mats. The ICRC mandated third party inspection companies[40] to visit 5 factories in China, Vietnam, Pakistan and Kenya for social, environmental and quality audits (before concluding Long-term agreements). Factory assessments and factory audits will be extended to more products (food, EHI, IT, Telecom…) and to more countries in 2013.

[40] http://www.ul.com/global/eng/pages/

Example 4: Life cycle analyses

In assisting victims of conflict, the logistical division delivers approximately 10,000 relief items to about 4 million people. The manufacturing, packaging, storage and distribution of these items have an environmental impact. That is why the impact of some of these products has been measured, using a life cycle analysis tool, in collaboration with an external company.[41] The tool measures the environmental impact of every stage of the product's life, starting from resource extraction and refining, to the manufacturing process, the packaging and distribution, to the use, end of life, and recycling. A good understanding of the whole process allows analysts to address the most pertinent issues, and not to tackle an issue which is not as important holistically.

In 2012, a study looking at the different impacts in the life cycle of a kitchen set showed that the biggest impacts are actually in the use phase and manufacturing phase of the product, and not in the transportation phase, as was predicted.

Another study conducted in the same year compared the impacts of rigid plastic buckets versus collapsible jerry cans. It was found that the packaging, which was originally intended as an area of intervention, has no significant environmental impact compared to the other stages of the life cycle.

Example 5: Study on smoke detectors

Approximately 5,000 smoke detectors are used by the ICRC. A study done in 2011 proposed a replacement for the smoke detectors used by the ICRC[42], which was made available in the new Emergency Catalogue. In 2012, a total of 550 smoke detectors were replaced.

New smoke detector

The model which was used previously was found to pose a number of disadvantages due to the alkaline battery it contains. Alkaline batteries are a hazardous waste, especially in countries without proper recycling facilities, and have a short lifespan of between six months and a year, meaning that a lot of waste is produced and maintenance costs are high as the batteries constantly need to be replaced.

The new model proposed[43] uses a lithium-ion battery, which is better for the environment and has a lifespan of 10 years, meaning a decrease of 90-95% of hazardous waste and 150,000 CHF of money saved over 10 years. The decrease in maintenance also brings added security and reduces transportation costs.

[41] http://www.quantis-intl.com/
[42] https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents%20de%20rfrences/Détecteur%20de%20fumée%20Bonne%20pratique.pdf (in French)
[43] The new smoke detector model is found in the administrators' manual and can be ordered when the current smoke detectors need to be replaced.

Chapter 3: Mapping of all initiatives taken in favour of sustainable development

The following mapping provides an overview of all existing initiatives and policies put in place related to sustainable development at the ICRC. This is linked back to the seven objectives made in the Framework.

Objectives[44]	**Area of intervention**[45]	**Initiatives in ICRC**
no. 1: Reducing the potential impact of environmental degradation and climate change on victims of conflict and other situations of violence	a. The elements should be taken into consideration when defining and implementing assistance programmes, especially by analysing the operational contexts, bearing in mind environmental, social and economic issues with a view to improving the ICRC's humanitarian response	• Regional Strategic Framework 2011-2014: Four regions clearly identified the environment as one of their priorities, two others made reference to it. • Framework for environmental management in assistance programmes: the objective is to guide, classify and structure field activities in a way that gives consideration to the environment • EcoSec: position paper on the use of natural resources and its implications for the dynamics of violence[46]. • Ortho: life cycle analysis of the products used to manufacture prostheses. • WatHab: following approval in 2009, promotion of the use of biogas systems in prisons. • Health: Manuel on Medical Waste Management • Guidelines for reducing delegations' environmental impact have been incorporated in the Administrators' manual, through links to the Sustainable Development website. • See more initiatives listed in Chapter 2.
no. 2: Controlling the environmental footprint of ICRC operational and support activities.	a. Drawing up a "road map" to enable the ICRC to monitor progress in environmental management at headquarters and in the field. (This concerns primarily the management of hazardous waste and the optimal use of energy and natural resources). Initiatives taken to improve the environmental footprint and put in place in the different phases of the road map:	Road map : • Milestone 1 – 31/12/2011: road map drawn up and approved • Milestone 2 – 31/12/2012: road map tested in at least three delegations • Milestone 3 – 31/12/2013: road map adapted and used in at least 13 delegations • Milestone 4 – 31/12/2014: review conducted and shared with key partners Initiatives • Procedures aimed at improving the management of hazardous waste produced by the ICRC (garages, IT, medical waste) were examined and implemented.

[44] From the Framework for Sustainable Development at the ICRC
[45] From the Framework for Sustainable Development at the ICRC
[46] EcoSec: Position Paper 2011-2015

		• Optimized use of natural resources, waste management and recycling (Geneva, Nairobi, Paris, New Delhi and Bogota). • Creation of a mobility programme for headquarters employees which encourages car-sharing and the use of public transport. • At headquarters, construction of the new buildings to the MINERGIE® standard, use of solar panels and heat pumps extracting heat energy from groundwater via micropiles, and the connection to the GLN system[47].
	b. Optimizing the supply chain to be able to deliver quality assistance needed by victims of armed conflict and other situations of violence on time, in the right place and at reasonable cost while taking into consideration the environmental, social and economic dimensions of these activities.	• Logistics: regular assessment of the production sites of the most widely distributed products (except food), special attention being given to social, economic, quality and environmental aspects. • Logistics: step-by-step implementation of a responsible procurement policy and environmental impact assessment study of material and equipment purchased by the ICRC. • Logistics: analysis of the carbon footprint generated by the transport of products and equipment.
	c. Using new technologies to reduce the ICRC's ecological footprint (for instance, video conferencing and WebiMax make it possible to cut back on travelling).	• The internal audio/video conferences are used more and more between the ICRC sites. Additional functions (such as shared desktop, shared applications) are used for users to "participate" in different events remotely. • New modules added (Lync Scheduler) in order to facilitate the virtual meeting with external interlocutors.
	d. Setting up vehicle tracking systems based on satellites or electronic logbooks to optimize vehicle use (trucks, cars and landcruisers).	• Computerized vehicle follow-up has been used in the institution for many years already in order to optimize the use of vehicles. • All vehicles used in the field meet the Euro 3, Euro 4 or Euro 5 emission standards (depending on the operational context and the quality of the fuel available). These standards often exceed the legal requirements of the countries in which the ICRC is working.
	e. Conference organization takes into account the three dimensions of sustainable development.	• Organized jointly with the International Federation of Red Cross and Red Crescent Societies, the 31st International Conference of the Red Cross and Red Crescent adheres to the principles of sustainable development http://www.rcrcconference.org/fr/green-conference.html

[47] Genève-Lac-Nations:

no. 3 The ICRC takes the social dimension into consideration in its capacity of employer and responsible organization	*Through general HR policies*. a. HR policies should promote gender equality and integration of diversity.	• Equal opportunities policy (objectives for 2011-2016). • Diversity management. • Code of conduct for expatriates and delegation employees.
	b. Training should be appropriate to the needs and expectations of the relevant staff categories.	• The training framework is conceived starting from a learner's perspective (instead of a trainer's perspective). • Training courses are organised with a diversity of participants (ex. mobile/residents) whenever possible. • Role plays and exercises take into account cultural and gender sensitivities as well as specificities of local contexts. • Courses are built in a way to respect the different learning styles the different participants may have
	c. The health and well-being of all staff members should be promoted.	• Capital Avenir – Avenir Foundation. • Career advisory service (Service Avenir). • External social worker available to all expatriates (headquarters and field) [48] • Independent Board of Appeal. • Staff Association Committee (COMAP) and ombudsman • Subsidized child-care facilities in Geneva, Kabul and Pakistan • Basic principles: respect for the principles of ethical conduct, confidentiality, medical privilege and social responsibility. HIV/AIDS programme.
	d. Safety at work should be encouraged (the objective being to reduce the number of accidents and health problems that are a source of great suffering and expense).	• RH/SAN –works to promote the mental and physical health of staff members.
	Through responsible procurement: a. The criteria governing the ICRC's procurement conditions have to be respected by our	• Financial and logistical resources: procurement code of conduct. • Training in responsible procurement

[48] http://intranet.gvb.icrc.priv/social/staff/socialworker/index.jsp

	suppliers.	
	Through responsible behaviour towards or beneficiaries: a. The code of ethics concerning exploitation and abuse of beneficiaries must be complied with.	• Code of ethics, standing invitee to the IASC[49] working group on protection of beneficiaries from exploitation and abuse. • Code of Conduct for the International Red Cross and Red Crescent Movement[50].
no. 4 The rules and principles of ethical conduct are systematically applied to the management of financial resources.	*a.* Investment options should be assessed against socially responsible investment criteria. This applies to all funds and reserves invested by the ICRC.	• Financing: partnerships with the private sector respect the ICRC's ethical principles. • The member countries of the "donor support group" (19 donors in 2009) all refer to one or the other of the following topics: "sustainable development", "environment" or "climate change" in their policies on development and/or humanitarian aid. • Financial reports are examined by an external auditor to IFRS standards (International Financial Reporting Standards). • ICRC investments, special funds and the Avenir Foundation meet social and environmental criteria. • Financial relationships with Operating National Societies.
	b. The fraud management policy should be applied.	• Fraud cases are recorded and managed in line with the framework for management of fraud and listed in the yearly report "financial statement''.
no. 5: Reference indicators for sustainable development parameters are defined and are subject to annual reporting	a. To measure progress, precise objectives and indicators must be defined. These will be useful for internal assessments of progress and will make it possible to compare the different delegations in the field.	• First set of indicators defined and successfully tested in 2013.
	b. These indicators will be the subject of an annual report on progress made in the implementation of sustainable development	• First report on sustainable development at ICRC in 2013. The indicators show general trends and patterns related to performance in sustainable development.

[49] IASC (Inter-Agency Standing Committee) Protection from Sexual Exploitation and Abuse by UN, NGO, IOM and IFRC Personnel
[50] http://www.icrc.org/fre/resources/documents/misc/code-of-conduct-290296.htm

	practices at the ICRC.	
no. 6: The ICRC's staff members adhere to the idea of sustainable development and put it into practice in their work.	a. An internal communication plan should be drawn up, based on specific, real-life actions so as to inform staff members about best practices in sustainable development that are being implemented within the organization.	• An internal communication plan has been drafted with the internal communication unit. • Intranet site open : http://intranet.gva.icrc.priv/structure/resources/whatsnew/res-dir-sustainable-development-new-site.htm • Share point site open to all ICRC Staff: https://collspaces.ext.icrc.org/imp/Environment-Adviser/Pages/Home.aspx • Humanitarian Leadership and Management School (HLMS), documents and video on sustainable development included in the online global library (compilation of resources available for students of the 4 modules of HLMS)
	b. The ICRC should communicate with its external partners (Movement, donors, etc.) to inform them of sustainable development initiatives taken by it.	• A page was open on the web : http://www.icrc.org/eng/who-we-are/mandate/sustainable-development/index.jsp • Four reports for the 30 main donors have been released: Update environment and sustainable development 2011: https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents/UpD_EnvironmentAndSustDevlp_REX2011_226_Final.pdfUpdate report gender equality 2012: https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents/UpD_2011ReportGenderEqualityAtICRC_REX2012_305_Final.pdf Update PFR and environment 2012: https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents/UpD_PfrAndEnvironment_REX2012_544_Final.pdf. Update Framework Sustainable Development 2012: https://collspaces.ext.icrc.org/imp/Environment-Adviser/Environnement/Documents/UpD_SustainableDvlpFramework_REX2012_158_Final.pdf
	c. Staff members involved in implementing the principles of sustainable development should receive special training.	• The Sharepoint site is particularly dedicated towards the staff in charge of sustainable development in the delegations https://collspaces.ext.icrc.org/imp/Environment-Adviser/Pages/Home.aspx

no. 7: Implementing the principles of sustainable development makes a concrete contribute to the ICRC's general partnership objective	a. Partnerships should be developed, especially as part of technical development projects for which the ICRC does not have the necessary know-how. In this way the ICRC will benefit from the technical expertise and local knowledge (context, culture) of research institutes, in particular university institutes, established in countries in which the ICRC carries out operations, and at the same time encourage local, applied research into sustainable development solutions.	• HEIG – VD – 'Etude de la performance du siège du CICR à Genève en matière de relations et conditions de travail et propositions d'amélioration' (Study of the headquarter's conformity with ISO 26000) • Diploma in CSR – University of Geneva « How can the ICRC measure its performance in sustainable development ? " Samuel Racine • Diploma in CSR – University of Geneva –« Définition et proposition de mise en œuvre d'indicateurs sociaux pertinents pour la stratégie développement durable au CICR –Véronique Mathys • HEG Genève - Diplôme en management durable - Changement Climatique - Réduction des émissions de Gaz à Effet de Serre au CICR – David Racapé • ICRC East Africa – Managing hazardous waste generated by garages – SOFIES consultants – discussions with Lafarge • Pertinence of the Life Cycle Analysis Method (LCA) for the management of the logistics supply chain – in partnership with EPFL in the framework of a Design Project • Solar water heating systems – a how-to manual – Assistance division and EPFL • Energostat - Internet platform for monitoring and management of energy statistics (test underway in the four pilot delegations) • Establishing a partnership with HP - Sustainability section - to recycle electronic waste at the pilot plant in Mombasa.

CHAPTER 4:

THE WAY FORWARD

The Way Forward

4.1 Challenges and lessons learned

This report has started the sustainable development reporting process and highlighted many positive initiatives taking place throughout the organization, and showing the gradual increase of awareness in the organization. However, if the momentum obtained for sustainable development issues is to continue, certain challenges need to be addressed.

In the Pilot Project, principles of sustainable development are put in place by a 'working group' with support from the headquarters. This interdisciplinary group, composed of volunteers from different departments, measures resource use and management of waste in the delegation, promotes best practices related to these issues and investigates practical solutions to mitigate the impacts. This often requires a transversal approach of analysis that brings different departments and divisions together in discussion.

A survey to the working group members gave some interesting feedback about the project.

- A large majority (more than ¾) believes that participation in the Pilot Project is beneficial for the delegation.
- One challenge is the lack of time[51] dedicated to work on the project.
- To some extent another challenge is linked to a lack of expertise. Lack of technical expertise is a key problem, as many of the best 'green' solutions for environmental management require a certain degree of technical know-how, in terms of identifying the technology that needs to be used, testing its feasibility and putting it in place.
- As the roles and responsibilities of the working group are not officially recognized, it is considered as an additional challenge for mainstreaming sustainable development principles amongst delegations' staff members[52].

Addressing these challenges becomes important when considering that more delegations will join the Sustainable Development Project: thirteen delegations will be part of the project in 2013.

Concerning programs on the field, the FEMAP is an important tool developed in the assistance division that encourages field operations to systematically assess, identify and understand the potential environmental impacts and implications of their activities and to take reasonable and feasible initiatives to reduce these impacts. Although this tool is already available, the challenge now is to get feedback from the field to highlight and to document best practices that can be used in the operations.

To address these challenges, some recommendations are made which should be fully adopted to strengthen the process allowing potentially all delegations to join in the future.

[51] Less than 2h/ month per person dedicated to the sustainable development
[52] Even if these principles are approved at the highest level of the management

4.2 Recommendations:

Recommendation 1: Official recognition of the head of the working group in the field

It would be advisable to officially recognize the head of each working group. This task should be part of their job description and therefore, part of their working time should be dedicated to it (tentatively, approximately 10%).The head of the working group needs to work closely with the delegation management in order to be able to implement the initiatives proposed. This will formalize the working group structure and empower the heads of the working group to implement initiatives in their delegations.

Recommendation 2: Participation of an administrator in each working group

In light of the role played in the delegation and because of his/her access to key data necessary to build indicators, an administrator must be part of the working group. The administrator is a powerful vector for the implementation of initiatives. With a global overview and links with logistics and HR, they are able to estimate the feasibility of projects (ROI, budgeting, staffing, impact) before presentation to the Head of Delegation. Additionally, the administrator is also in a position to ensure the necessary collection of data for the measurement of indicators.

The administrator could also give support to the head of the working group. The group head would play the role of sustainable development adviser in the delegation.

Recommendation 3: More systematic application of the Framework for Environmental Management in Assistance Programs (FEMAP)

It is recommended that the FEMAP be promoted and applied more systematically when designing assistance programs, and that the FEMAP document itself should be enriched with best practices from the field that other users can refer to for instruction. This should be done in collaboration with the working group for sustainable development and the head. One person from operations also has to be part of the working group and relay the information.

Recommendation 4: Continuing external partnerships

To support all initiatives related to the principles of sustainable development, it is necessary to keep on developing external partnerships in the area of technical development where the organization lacks the necessary know-how; for handling waste[53], using adequate materials[54] or managing all issues concerning energy[55]. It is advantageous that the expertise or applied research oriented towards sustainable solutions is taken directly in the countries where the ICRC operates, as they are often better adapted to their local contexts.

Recommendation 5: The development of an 'Environment and sustainable development competence unit' based in the field

To encourage innovative, concrete solutions to support the initiatives taken for sustainable development, a competence unit should be developed in one of the ICRC delegations. This unit should promote sustainable responses on environmental and socioeconomic issues related to our assistance and support activities at the national, regional and global levels. The aim would be to identify the green technology that complies with sustainable development principles which can be integrated into the organization.

People working in the unit should document and help to implement best practices in our operations and practices and provide concrete and relevant answers[56] to the requests coming from the field[57]. They have to put in place the tools to manage and organize all the data in order to report regularly on the indicators.

The unit should include two people: one technical adviser looking for and testing green technologies and one person dedicated more specifically on data collection reporting and using software like Energostat or life cycle analyses.

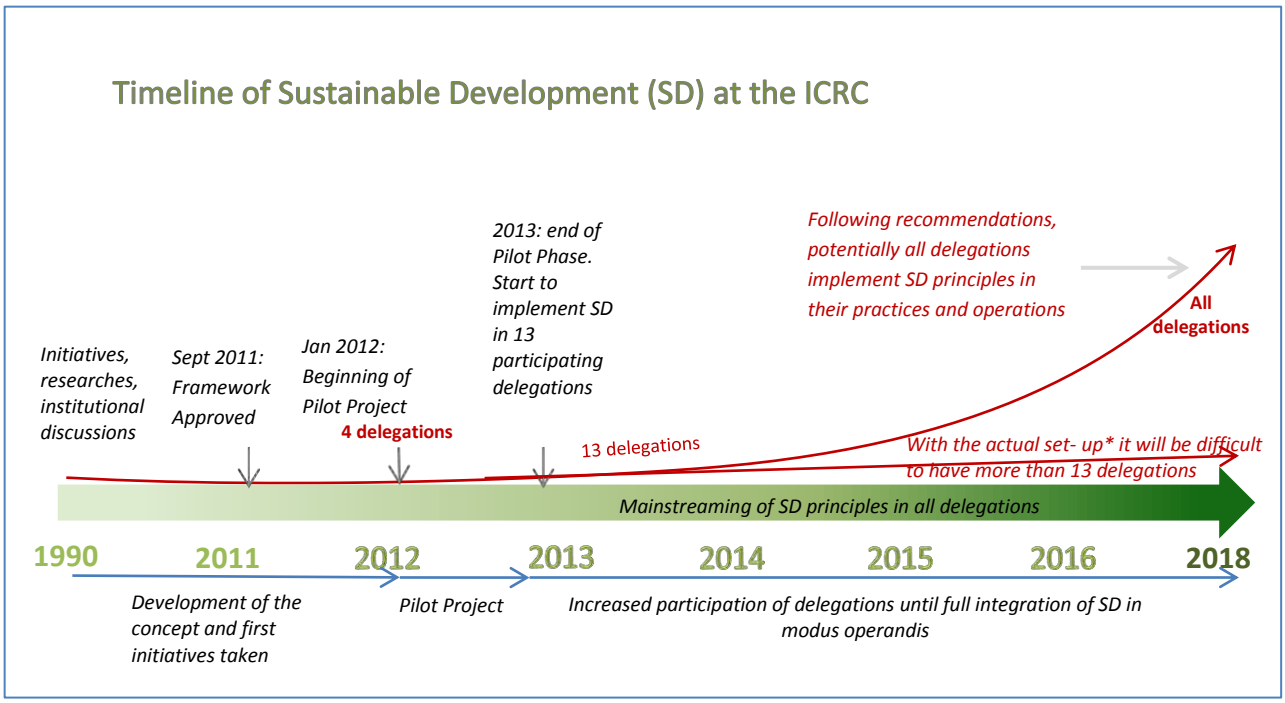
This unit will support the adviser for sustainable development in Geneva and the sustainable development working groups in the different delegations. The unit would be a key element to support the mainstreaming of sustainable development initiatives at ICRC which is sincerely committed to meeting its social, economic and environmental responsibilities.

Recommendation 6: Continuing and expanding the sustainable development reporting process.

This report lays the groundwork for sustainability reporting, explaining the methodology and giving the results of 2012 for six indicators in the domains of environment and social responsibility. However, for a better overview of sustainability in the different sites, it is important that this process be continued and expanded, to include more indicators in the different domains.

[53] LaFarge for garage waste, HP for e-waste and Kigali Institute of Science and Technology for biogas systems
[54] Quantis society for conducting life cycle analyses
[55] Base consultants SA for solar water heating
[56] In coordination with the adviser for sustainable development in Geneva.
[57] The vast majority of the requests coming from the field are for concrete action and green technology.

4.3 From the past to the future: the progress of sustainable development at the ICRC



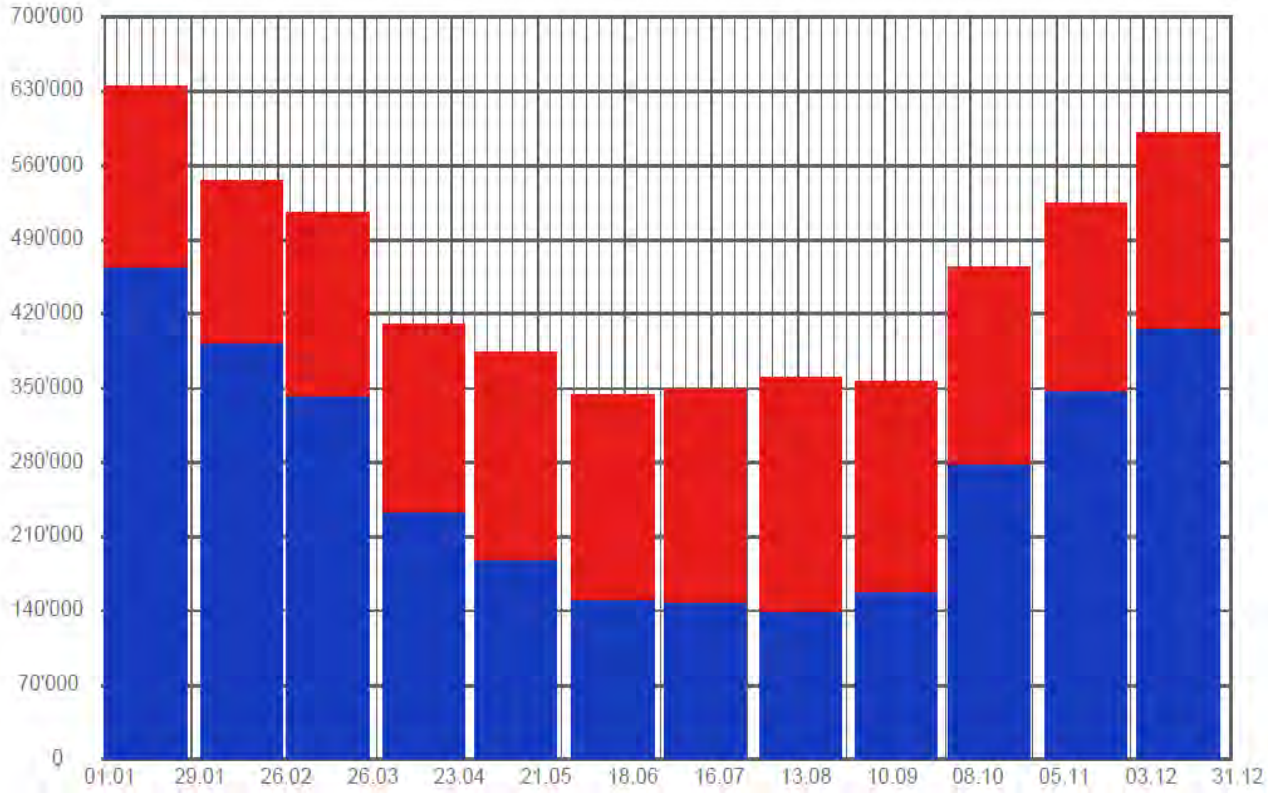
Annex

ICRC

The ICRC's Energy and Environmental Policy

Using a new energy management tool[58]
energostat.ch

[58] Study made by SORANE S.A. Rationalisation Energétique : http://www.sorane.ch/


700'000
630'000
560'000
490'000
420'000
350'000
280'000
210'000
140'000
70'000
0
01.01
29.01
26.02
26.03
23.04
21.05
18.06
16.07
13.08
10.09
08.10
05.11
03.12
31.12

Energostat.ch: a simple and effective energy management platform

Description:

The energostat.ch management tool is an energy-accounting solution developed by the Energo Association, which aims to reduce energy consumption in buildings. Energo is supported by the Swiss Federal Office of Energy (SFOE) as part of the SuisseEnergie (Switzerland Energy) programme. It works with building operators to help them save energy and pursue energy-efficiency policies.

Energostat.ch makes it possible to track and analyse the consumption of multiple energy carriers (gas, fuel oil, electricity and water) and the emission of waste by a building or a group of buildings.

Why set up energy accounting?

The term "energy accounting" covers the entry, presentation and analysis of data on the consumption of energy carriers (electricity, gas, fuel oil, wood, water) and other substances (paper) and on waste emission by buildings. The goals of energy accounting are as follows:

- **To track** the consumption of different energy carriers over time;
- **To identify** defects and malfunctions in the facilities;
- To determine and **rank** the optimization and adjustment **measures** to be taken;
- To see how a **building compares** to others in a group of buildings.

The ICRC needs to equip itself with such a tool in order to steer its new policy on energy and environmental resource management.

What are the advantages of using energostat.ch?

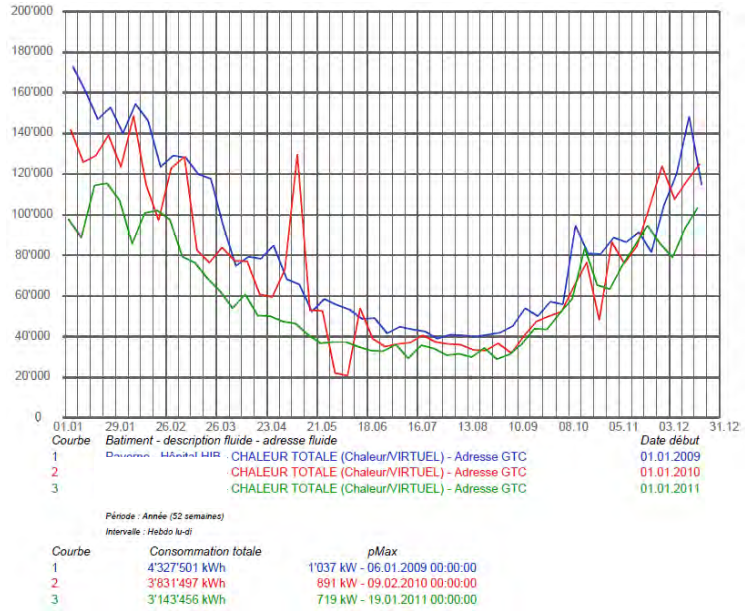
- Advanced analytical tools: provision of reports, graphs, and reporting on consumption by buildings, which can point the way towards optimization and aid in decision-making (but not in finding solutions).
- Internet platform: access 24 hours a day, seven days a week, anywhere in the world. No special information technology resources are needed, so there are no additional charges.
- Data entry: simple; can be done manually or by a remote management system.
- Safety: data are backed up daily to an external database to avoid losses.
- Adjustable tracking intervals: data can be processed at different intervals (hourly, daily, weekly, monthly).
- Benchmarking: this application is one of the few that allow precise comparisons to be made with several thousand buildings throughout Switzerland. It will also be possible to compare ICRC buildings with one another.
- Low cost: Energo is a non-profit organization and its tool, energostat.ch, is sold at a very low price. It was developed with financial support from the Swiss Confederation, unlike private software, which would be much more expensive.

Examples of analytical tools

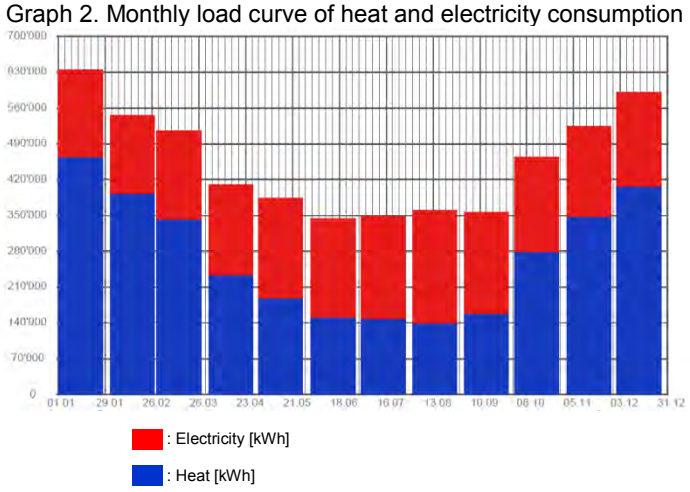
Load curve:

Allows consumption to be tracked over time. The display interval can vary (daily, weekly, monthly or yearly), but cannot be lower than the recording intervals. The following are examples of graphical displays:

Graph 1. Weekly load curves of heat consumption, 2009–2011



Graph 2. Monthly load curve of heat and electricity consumption



Energy signature:

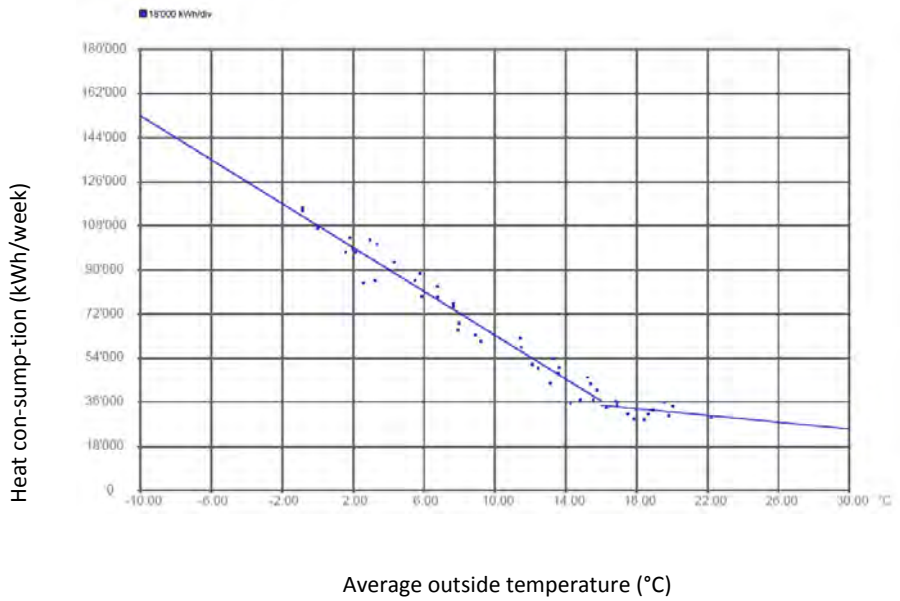
This is one of the most important and most frequently overlooked tools. It makes it possible to track energy consumption while taking climate into account through outside temperature. Thus, it gives

meaning to comparisons of consumption over several years or between buildings located in different geographical and climate zones.

The signature is consumption displayed as a function of outside temperature; it provides the building's consumption profile (see example below).

Note: climate data will be supplied by the project officers at headquarters in Geneva.

Graph 3. Heat consumption signature, measured at weekly intervals



Creation of arithmetic counters and operations:

Different types of counts can be created ad infinitum without additional costs. Thus, in addition to energy carriers and outside temperature, various elements whose number (i.e., whose value) changes over time can be counted. It is even possible to count low-fluctuating data, such as energy tariffs.

It is also possible to perform arithmetic operations (addition, subtraction, multiplication) on and between different counters for a more accurate and targeted analysis.

The ICRC's goal is to count energy carriers (heat, gas, electricity) as well as quantities of paper and water. Indices of surface areas and numbers of occupants will be created so that a relevant comparison can be made between different delegations. A financial estimate can also be established with this tool.

In the future, it will also be possible to consider counting car batteries, miscellaneous waste, kilometres travelled, litres of waste oil and carbon dioxide (CO_2) emissions.

Energy certificate:

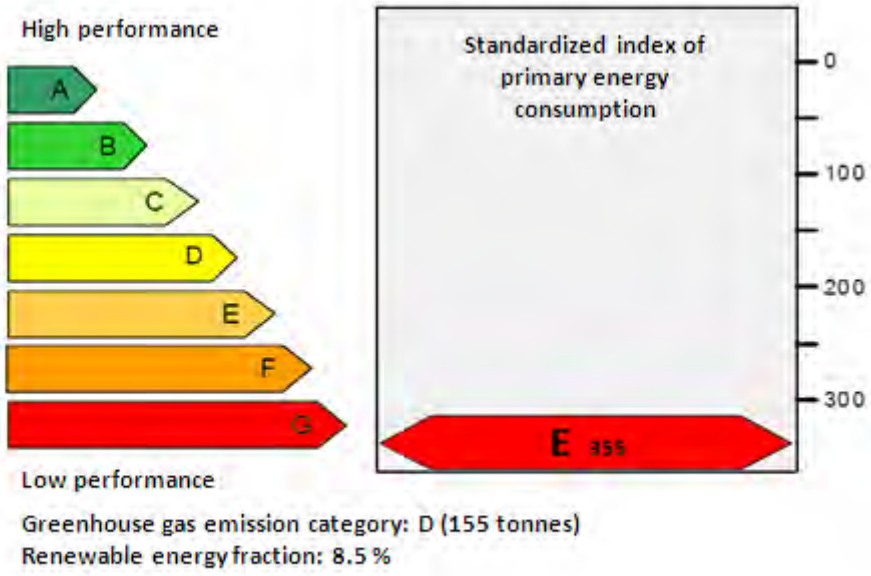
The energy certificate, also called the "energy label," provides an overview of a building's energy performance. In accordance with Swiss standards, it is based on total annual **primary energy** consumption and related greenhouse gas emissions for all building services, such as heat, ventilation, lighting, air-conditioning and a variety of equipment.

The various types of energy consumed (gas, fuel oil, electricity) are weighted by their primary energy factor and added to obtain total consumption, which is compared with the energy reference area. This index is then compared with the reference consumption, i.e., consumption by a building in the same category (administration, hospital, warehouse) that complies with the standards and regulations existing at the time the certificate is issued.

Definition: primary energy is that which is found in nature. It is the basic "raw" energy needed to produce the final energy delivered to the consumer. Examples of primary energy are crude oil in the layer, underground coal, standing timber and uranium ore. A number of transformations and conversions, as well as storage and transport, lie between these two types of energy.

Information: the Swiss standards drafted by the Swiss Society of Engineers and Architects (SIA) are simply the implementation of European Union standards in Switzerland.

Figure 1. Example of an energy certificate



In the above example, there are several solutions for improving the building assessment:

1. Optimize heat and electricity consumption through an audit and targeted actions (renewal of the building's thermal envelope, reduction of electric power, reduction of running times).

2. Replace energy carriers that have a strong impact on primary energy (such as electricity) by choosing less weighted carriers or by increasing the share of renewable energy, which in this example is limited to only 8.5%.

Questions and answers on energy accounting challenges

- ***What are the ICRC's stated aims?***

The ICRC is a major humanitarian organization that carries out activities around the world. For now, its energy and environmental impact is mostly unknown, but above all unregulated. The stated aim is to conduct an effective energy, resource and waste management policy through this new project. By drawing up an initial profile of the delegations and then establishing dynamic follow-up, the ICRC

will in the future be able to set achievable optimization targets, conduct actions and monitor their results. The energostat.ch tool was developed wholly from this perspective.

- ***Can new tools be developed with energostat.ch?***

Yes, energostat.ch is an upgradeable platform, and teams of developers can work on additions or other specific requests from the ICRC at very competitive (non-profit-making) prices.

- ***Can delegations around the world be compared with one another?***

The uses of ICRC buildings in delegations around the world will be considered similar and hence comparable for each category of activity (administration, warehouse, garage, hospital).

- ***Do delegations have to be separated by geographical areas?***

Initially, there will be no geographical separation, as the first analysis is comprehensive. Later, discussions will take place on a possible division into zones.

- ***What criteria will be used in the comparisons?***

In order to compare buildings with one another, it is necessary to produce a number of indices, such as consumption per surface area, per person, per car, and so on. Here are a few examples:

  - kWh of heat / electricity per m^2
  - kg of paper per person
  - kg of waste per person
  - litres of water per person
  - tonnes of CO_2 per m^2

Tools such as the energy signature and energy certificate will also be used.

- ***What is the purpose of the energy certificate, and how should it be used?***

It is the first “close-up portrait” of a building and represents its overall energy impact, taking into account the quality of its construction, the types of energy carriers consumed and, lastly, its use, through its facilities, its equipment and the behaviour of its occupants. The certificate is an effective comparison tool that will make it possible to target the optimization potential of the actions to be carried out.

- ***Are Swiss standards relevant to ICRC delegations when it comes to drawing up the energy certificate?***

It’s true that primary energy factors depend on the country and that, for example, the Swiss electricity mix (60% hydraulic and 40% nuclear) is not the same as the Kenyan or the French mix. However, we will keep the current calculation method, which is deemed sufficiently reliable and relevant at this stage of the study. But in the future it will always be possible to develop a new tool based on energostat.ch in order to take into account the specific features of the energy types available in different countries.

Technical considerations regarding energostat.ch

- ***Recording and entry of count data:***

The recording and entry of all the count data that will be requested of different delegations is crucial for follow-up and, in general, for the management policy that will be implemented by the ICRC. This is the basis of the control and analysis chain, which is why it is very important to pay close attention to this first stage.

For each count, the day's displayed / read / counted **value** and the **date** must be simultaneously recorded on-site.

- ***Indicators and analytical tools:***

In order to observe the delegations' energy-related and environmental behaviour, and to be able to compare delegations with one another, a wide range of indices and analytical tools (described above) will be configured on the platform and in the reports provided.

To promote a better understanding of their meaning and utility, here is a list and description of the key terms used:

- kWh (kilowatt-hour) and MJ (megajoule): units of measurement of the amount of energy consumed, whether electrical, thermal or other. Note that 1 kWh = 3.6 MJ.

- kW: a unit of measurement of the power of a facility or piece of equipment.

- kWh/m^2 and MJ/m^2: the amount of energy consumed in relation to a reference area, often the total surface area of the building concerned; allows buildings to be compared to others and to the existing standards.

- kg/person and litres/person: the amount of matter (e.g., paper) and water consumed and of waste emitted in a delegation in relation to the number of employees.

- kg CO_2/m^2: the index of greenhouse gas emissions, expressed as carbon dioxide equivalent, resulting from the energy consumed by the building relative to its reference area.

- calorific power: the amount of heat generated by the combustion of a defined amount of fuel at atmospheric pressure, expressed in kWh/litres (fuel oil) or kWh/m^3 (gas).

- ***Improving the energy and environmental impact based on the type of energy:***

The energy certificate takes into account the primary energy consumed by the building, i.e., the raw energy equivalent extracted from the natural environment. Thus, not all forms of energy are equal in terms of their impact on resources and the environment.

For example, electrical energy has a primary energy factor of 2.97 (based on the Swiss mix), which means that it is necessary to consume about 3 kWh in order to bring 1 kWh to the consumer. In comparison, fuel oil has a primary energy factor of 1.24.

Optimizing the impact of heat or electricity consumption may thus take the form of changing the energy carrier or the way in which it is produced. Using fuel oil or gas for heating has less impact than using electricity, unless it is produced locally from renewable energy sources. Likewise, any consumption of renewable energy will be better than consumption of resources that can be used up.

- ***Follow-up reports in the energy management process:***

Implementing a policy of energy and environmental resource accounting and management involves a number of steps, as follows:

1. Choosing and defining the parameters of a suitable accounting tool (energostat.ch).

2. In each delegation, entering the data (counts) for the buildings concerned into the system.

3. ***In each delegation, producing periodic follow-up reports.***

4. Analysing the reports locally: they are the basis for follow-up and make it possible to set feasible and relevant targets for optimization and to verify the effectiveness of the actions already taken.

5. Analysing all the reports centrally: an overview of all delegations helps to identify the potential for major improvements. ICRC officials can thus decide on the actions to be taken to optimize energy and environmental efficiency and can assist the delegations concerned.

6. Conducting actions to optimize efficiency in the field.

- ***Preparation of reports by the heads of delegations:***

In order to be read and, above all, used in pursuing the ICRC's policy on energy and environmental efficiency, the reports should be short, condensed and relevant.

In our experience, the model report should include the following elements, in the order listed:

- The previous year's energy certificate;

- A recap of annual consumption of heat, electricity, water and paper and of miscellaneous waste emission for the previous three years;

- Graphs of monthly consumption of the key energy carriers (heat, electricity and water) for the current and previous years;

- The energy signatures for the total consumption of heat and electricity. Previous years, or a reference year, can appear in the same graph;

- Graphs displaying the cumulative consumption of a given energy carrier from the beginning of the current year. Previous years can appear in the same graph and serve as a basis of comparison;

- A table of the key indices of energy and resource consumption and waste emission;

- A benchmarking comparison of the indices for the building or buildings covered in the report with those of other buildings used by ICRC delegations or with other buildings in the same category in Switzerland or in the European Union;

- The key locations in which optimization could potentially be achieved, based on the analysis provided in the reports, the site configuration and the opinion of the delegation head;

- A list and description of the optimization actions under way.

Warning: before any facility, process or building is modified, the initial states of all the parameters that have been modified must be listed in the report in chronological order. In the event of a false start, it should always be possible to retrace one's steps.

It is important for the few graphs that are displayed in the report to provide a simple and quick picture of the consumption profiles and how they have changed in comparison with previous years.

The choice of a reference year often requires careful consideration: it is the starting point for an efficiency policy and should make it possible to validate the actions taken and the method used.