

Mobile World Congress at Fira Barcelona: Entry for 2015 UFI Sustainable Development Award competition

1. Introduction

The **GSMA** represents the interests of mobile operators worldwide. Spanning more than 220 countries, the GSMA unites nearly 800 of the world's mobile operators with 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organizations in industry sectors such as financial services, healthcare, media, transport and utilities. The GSMA also produces industry-leading events such as **Mobile World Congress** hosted in the **Mobile World Capital**, Barcelona, at **Fira Barcelona**.

Mobile World Congress is the world's largest mobile industry exhibition with more than **85.000 attendees** from over **200 countries**, and more than **1.800 companies** with exhibition and hospitality spaces across nine halls and outdoor spaces at Fira Gran Via. Since 2008, the GSMA has been committed to reducing the impact of its events on the environment, both in our offices and at our events. In particular, Mobile World Congress focuses heavily on reducing waste in printed materials, encouraging the re-use and recycling of materials at the venue, utilizing digital signage and electronic tools, and working with Fira Barcelona, exhibitors and local partners to minimize the impact our event has on the environment.

In the last few years, the growing environmental requirements of external organizers, together with Fira Barcelona's commitment in increasing the sustainability of our events, gave us the opportunity to launch in 2007 an integrated sustainability program, to help us to reduce our energy and waste management costs, to promote new technology initiatives that support this program, and also to join efforts with GSMA in its sustainability commitment.



2. Objective

Joining efforts, both **Fira Barcelona and GSMA**, have the objective of creating a **more sustainable event** in Barcelona while looking for any innovative cost-saving opportunities in the value chain. The objective is based on the following principles:

- To contribute to the preservation of the environment by **reducing the emissions and waste**
- To **educate attendees, exhibitors and partners** about our goals and encourage them to be green along with us wherever possible to minimise our impact on the environment
- To continually **identify new and additional opportunities** to reduce our event's environmental impact while looking for cost saving opportunities.

3. Actions

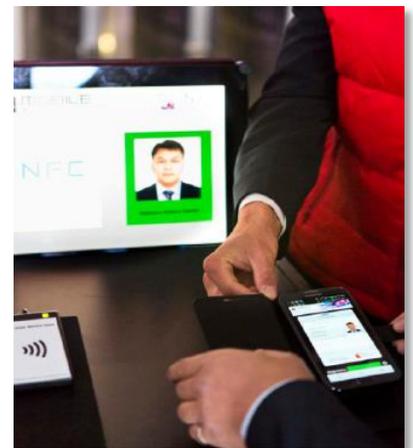
There are several streams developed with the assistance of different companies of environmental and energy consultancy, to help us through the assessment and the identification of actions to be taken.

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Since sustainability should be considered as an overall concept, the actions taken go from the attendee until the world, considering the impact on sustainability of an event such as Mobile World Congress, and this is why the actions are organized in a **target diagram: Attendee → Event → Venue → City → World**.

Attendee

There are many ways an attendee can be 'green' at the event. Besides the obvious (taking advantage of recycle bins) we encourage attendees to be part of the sustainability innovations. In 2012, Fira Barcelona launched the **mPowered Experience project**, based on a continuous program centered on facilitating the visitor's interaction with the different elements and actors of a fair or congress with the objective of providing an excellent experience. The "m" from "Mobile" emphasizes the significance of the mobile technology in all its forms, which is and will be key to the events sector; "Powered" highlights all that we define as the "Experience" of the visitor as an active part of the event. In that sense, the **GSMA App allows the attendee to take advantage of our digital mapping tools and exhibitor listings, providing updated information, reducing the papers printed**.



In 2014, there were more than 74000 downloads of the GSMA App, and more than 80000 unique daily users through all the vents days. More than 23000 users, using the mapping services with geolocation skipping the use of printed floorplans. Mobile Registration and Digital Badge have been one of the key points of the success of the app while contributing to sustainability with more than the 60% of the attendees using the final confirmation code on a mobile device to collect the badge, 16000 using the app feature (that means paper printing savings) and more than 14000 NFC Badge users.

A critical issue on an event like MWC is the use of mobile devices and the solution that mixes innovation and cost-saving is to use the **solar charging points to wirelessly charge** devices in the lower level Networking Gardens.

The attendees can also take **public transportation using the free Transport Pass** distributed at Registration, FGC trains and the Metro often move faster than the taxis, and fewer cars on the roads help to reduce air pollution in Barcelona.

Event

The GSMA Carbon Neutral programme's initiatives were distributed around the venue; **food outlets offer recycled and compostable service items**, all event publications are presented on **recycled paper**, and event bags and badge lanyards are **made from recycled plastic bottles**. In addition to that, there are other areas where GSMA focuses on sustainability:

- The MWC Media Centre is entirely **paper-free**; all materials for the press are presented electronically
- The GSMA Stand is entirely **paper-free**
- The **Green Stand Award Programme** encourages exhibitors to build environmentally responsible stands.

- Improved event technology (the My MWC mobile app, digital signage and our Tap-n-Go Points) means we are able to print fewer exhibition catalogues and maps.

Together, Fira Barcelona and GSMA, have also focused on the **control of abandoned waste**. The eco-design focuses in minimizing the amount of waste related to the stand constructions, but there is still waste created in the exhibition activity that needs to be controlled and managed, otherwise stand builders could leave the waste abandoned in our premises. In order to minimize the abandonment of waste a new waste management policy was set to control the process and also to incentive the proper management of waste. The goal was to reduce the volume of waste to be handled and, indirectly, reduce waste in absolute terms, as the stand builder incentive it would be to reduce the waste produced by its own activity. To support this policy we eliminated the skids that use to be available for stand builders free of charge, we established a control patrol with cameras that are reviewing the dismantling process, making sure that the policy is being applied and identifying those companies that are not complying with the policy. Further, we reserved the right to apply penalties to those stand builders doing infringements.



In relation to **waste recycling** we must consider that a significant amount of waste is created during the exhibition, by the disposal of leaflets, and other paper waste. This is why we installed up to 40 different ecological islands in our premises, in areas with a high visitors flow, to help us collect and recycle this kind of waste. Carpet is one of the greatest components of waste. Fira has worked in several projects to recycle the used carpet: converting used carpet in isolating material that could be used in construction, or in roads, and some other recycling initiatives. For MWC, we will recycle all **hall and walkway carpeting** after the event into **Solid Recovered Fuel**.

For **catering surpluses** we worked with **NGOs**, so that they could pick up daily the surpluses of food. P.eg we collaborate regularly with Banc dels aliments and Nutrición sin fronteras.



Carbon Footprint and Neutrality Tool for Attendees & Exhibitors



Increased Use of Recycled or Recyclable Materials



Offer Lower Carbon Footprint Stand Packages



Promote Wide Use of Public Transport in Barcelona



Local Food and Low-Carbon Materials for Catering Services



Establish "Green Stand" Awards



Venue

Fira de Barcelona's energy policy is to be articulated around two basic pillars: **promotion of energy efficiency**, on one hand, and increased **use of renewable energy sources**, on the other hand. Fira de Barcelona is leading the field

in this aspect: in August 2008, installation was completed of a photovoltaic plant installed on the roofs of the Gran Via halls, consisting in 25.947 solar panels covering a usable roof surface of 200,000 m². With a rated installed capacity of 4.42 Mw, it is able to generate almost 5 GWH/year of “green” energy.

Also, in relation to **power and lighting**, the design of the venue has been done in a way that maximizes the entrance of natural day light, therefore reducing the need of lighting in the halls, especially during build up and tear down periods. We have also achieved a further reduction of 857 MWH/year by optimizing the periods during which different parts of the complex are illuminated, measures involving the service galleries, the venue’s outdoor lighting and turning off the lighting in Fira Barcelona’s offices at night.



In terms of **air conditioning**, Gran Via venue was designed with an architectural double skin in some areas. This double skin though allows the entrance of natural light, creates a layer that isolates the building and reduces the thermal transfer, decreasing the energy required to control the temperature in the halls. The building also counts with several bio-climatic outdoor areas that are designed to take the maximum advantage of the hours of daylight, helping in the temperature control of the halls and reducing the need of lighting, while providing an excellent space to comfort our visitors. As regards

design for climate control efficiency, a climate control system called “District Heating and Cooling”, a state-of-the-art technology in efficient, sustainable climate control systems, has been installed in Gran Via Venue. This system is based on the generation of hot and cold water at a centralized plant that is then supplied to the clients of an industry and/or services park. The halls of the Gran Via venue are clients of the South Barcelona “District Heating & Cooling” project. Three generation plants (biomass, regasification and tri-generation) supply hot and cold water through a network of pipes totaling several kilometers to different clients, including Fira Gran Via venue.

Regarding **water consumption**, Gran Via venue is provided with several fountains in the main accesses. To minimize the environmental impact of these fountains, they are fed using groundwater. Gran Via venue also features a system to heat water through solar cell panels, reducing the energy needed to heat the water. In order to reduce the consumption of water the men’s toilettes has been replaced by water-free toilettes.

City

The Mobile World Congress is the cornerstone of the Mobile World Capital, which will be hosted in Barcelona from 2013 to 2018. The Mobile World Capital encompasses programmes and activities that span the entire year and will benefit not only the citizens of Barcelona, Catalonia and Spain, but also the worldwide mobile industry. In terms of communication, the joint work with the led them to win the **Acció Agenda 21 awards**, for applying sustainability practices to the event held at Fira Barcelona. This program has also been shared with the tourism agency of Barcelona and the city council of Barcelona, that included the details when presenting the **Biosphere candidature for the city of Barcelona**, finally awarded with this certification in 2011.



World

For those areas where cannot avoid carbon emissions, the GSMA will once again make donations to international renewable energy and energy efficiency projects that reduce carbon dioxide emissions. Carbon credits purchased by the GSMA help finance several emissions reduction projects registered under the **Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC)**. These projects include the Dongliuxi Erji Hydropower project in the Hubei province of China; bundled wind power projects in the Indian state of Rajasthan; and the Olkaria II Geothermal Expansion Project in Kenya, amongst others.



4. Results

In July 2014, **Mobile World Congress 2014 became the largest conference and exhibition to be certified as carbon neutral through PAS 2060**, an internationally recognised certification system. To achieve this certification, the GSMA calculated Mobile World Congress' 2014 carbon footprint; developed a footprint reduction strategy; and offset emissions that could not be avoided. The certification marks the latest step in the GSMA's long-standing and continued commitment to preserving the environment.

In order to obtain the certification, the GSMA worked with consultancy Factor CO2 to calculate Mobile World Congress' carbon footprint, develop a management plan for reducing its impact and compensate the remaining emissions. As an independent third party, AENOR has confirmed that the sources of emissions identified and the greenhouse gas emissions are correct, in accordance with the international standard PAS 2050:2011. Further, AENOR has verified that Mobile World Congress is neutral in emissions, following the GSMA's implementation of reduction measures and purchase of credible carbon credits to offset the remaining emissions generated during the event, in accordance with the international standard PAS 2060.



The 2014 Mobile World Congress generated approximately 165,000 metric tonnes of carbon dioxide equivalent (tCO₂e); it is estimated that 89 per cent of carbon emissions related to Mobile World Congress resulted from attendees travelling to and from the event, as well as their stay at the event, while the remaining 11 per cent are associated with the venue and operation of the event.

All the innovative initiatives described in the document have contributed to achieve this figure while in the case of the venue operations have contributed to achieve significant cost savings, thanks to the joint effort of GSMA and Fira that have taken into account the value chain during all the processes.

5. Conclusions and learnings

Thanks to the analysis and to the overall results, to obtain the certifications has allowed us to:

- Identify areas on inefficiency while improving the overall performance of different service
- Make cost savings by reducing the energy consumption and other areas like waste management and recycling.
- Underscore long-standing, continued commitment to the environment
- Establish solid foundation for future environmental initiatives

6. Next steps

For Mobile World Congress 2015, the Carbon Neutral Programme and initiatives has become a major milestone in the development of the event and its processes.

Both GSMA and Fira will continue looking for new initiatives that can be included in the programme such as new features for the GSMA App that will contribute to the printed paper reduction creating 'digital bag' with content, adding more functionalities for marketing purposes, and reinforcing the communication related to its use.

Finally, we would like to state that in a project like this, communication is crucial, so we will continue involving from the beginning as much stakeholders as possible (attendees, exhibitors, employees, partners, clients, etc.), as it can provide enormous help and act as a motor for the development of the initiatives.