Carbon Neutral Event

FICCI CIRCULAR ECONOMY SYMPOSIUM, NEW DELHI
May 14th – 15th 2018

INFINITE SOLUTIONS

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Message from the Head, FICCI Quality Forum

The Indian economy is at a critical stage of its journey - a stage that is characterized by rising demand-supply constraints, fast changing consumer preferences and an increasing stakeholder's expectations. Given the current resource constraints, business-as-usual is not sustainable and there is a need to decouple growth from resource requirements and consider a new way of dealing with the material cycle. Circular Economy, in such a scenario, through its innovative business models, serves as an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.

With this background, FICCI hosted the second edition of Circular Economy Symposium on 14-15th May 2018 at Federation House, New Delhi to mainstream Circular Economy Principles in Indian businesses for long term value creation.

Considering the theme of the event and in our quest to make the event sustainable, following initiatives were taken during CES 2018.

- Paper consumption: We had envisaged paperless event, however minor paper consumption was unavoidable which included agenda and report printing.
- Use of recycled paper: The event badges and pens were prepared using recycled paper limiting the use of plastic.
- Distribution kit: The bag for distribution of event material was made of reusable canvas and used newspaper.
- Distribution of Seeds: An innovative plantable seed paper was part of the distribution kit.
- Felicitation through Tree Certificate: Speakers were felicitated through a tree certificate (a docket of trees were planted in their name) in place of the traditional approach of offering them a bouquet.
- Carbon Neutrality: The emissions attributed to the event shall be offset from a Gold Standard project to make it a carbon neutral event.

We believe in showcasing our commitment to environment as well as encourage others to follow the lead. We look forward to organising such sustainable and Carbon neutral events in future.

Mr. Mritunjay Kumar
Head
FICCI Quality Forum

Key Information about the Event

Event Name	2nd Edition of Circular Economy Symposium, Delhi
Physical Boundary	The boundary consist of physical boundary of the event which happened in New Delhi at FICCI Federation House, Tansen Marg, New Delhi, 110001
Event Dates	14 – 15th May 2018
Emission sources included	**Scope 1 Activities:** • On site fuel consumption • Travel by Company vehicles **Scope 2 Activities:** • Consumption of Purchased Electricity **Scope 3 Activities:** • Catering • Accommodation • Travel (Local and Outstation) • Paper Consumption
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Executive Summary

The 2nd Edition of Circular Economy Symposium (CES) organised by FICCI on 14th -15th May 2018 has been organised to be a carbon neutral event. The details of the scope for emissions calculation, the methodology adopted, calculation process and the assumptions considered are described in the report.

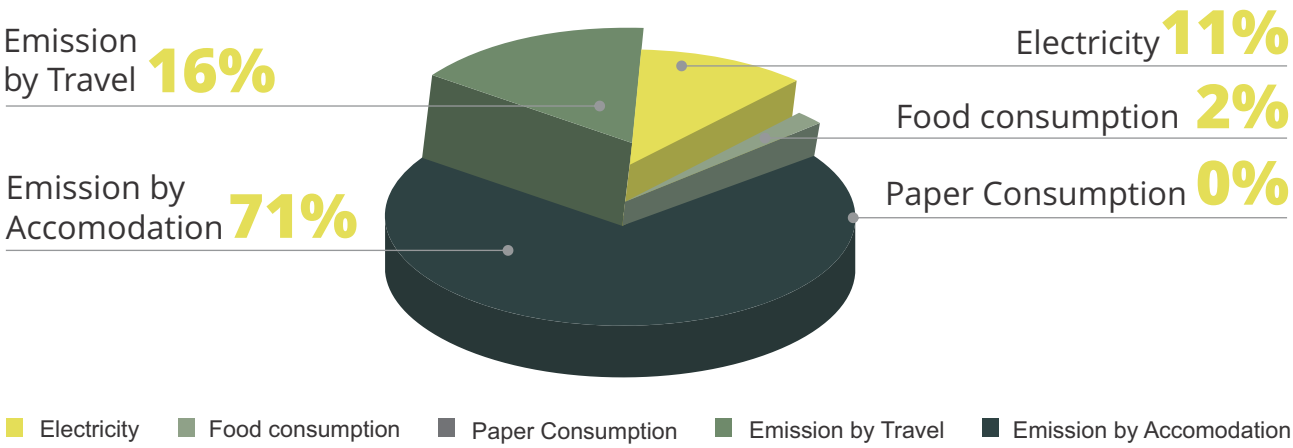
FICCI partnered with Infinite Solutions as a "Carbon Neutrality Partner" for the emissions estimation as well as for offset of emissions.

Summary of emissions by Source and Scope

Sources	Emission Activity	Emissions tCO2e	Scope wise emissions	% Emissions
Total Scope 1 Emissions	Nil	0	0.00	-
Total Scope 2 Emissions	Electricity	3.40	3.40	10.64
Total Scope 3 Emissions	Food consumption	0.66	27.64	86.36
	Paper Consumption	0.01		
	Emission by Accommodation	22.16		
	Emission by Travel	4.81		
	Total Emissions	**32.00**		**100.00**

Graphical Representation of Emission sources & its contribution

Emission sources%



GHG removals/offset

Project Title	GS ID	Project Link
100.5 MW Wind Power Project in Madhya Pradesh, India	GS 3969	https://mer.markit.com/br-reg/public/project.jsp?project_id=103000000009191

The emissions due to the event have been offset, thereby the event has been termed as Carbon Neutral Event.

I. Introduction

1. Federation of Indian Chambers of Commerce and Industry (FICCI)

Established in 1927, FICCI is India's oldest and largest apex business organization. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI Quality Forum (FQF) is the training and consulting wing of FICCI. We provide training, consultancy and research services to Indian Industry in areas of Quality Management, Environment management and Soft skills amongst others. As part of our work on mainstreaming upcoming and contemporary subjects within the Indian industry, we have established platforms on mainstreaming Life Cycle Approaches and Circular Economy.

2. Circular Economy Symposium (CES)

FICCI launched the Circular Economy Symposium (CES) to drive the Circular Economy agenda forward in India in the year 2017 with a vision to promote knowledge and action on Circular Economy by way of annual symposiums and through encouraging dialogues on the subject.

More information about the event is available at http://www.ficcices.in/

3. Infinite Solutions

INFINITE SOLUTIONS, an ISO 9001:2008 certified company, is a leading consultancy company based in India which has been formed with a vision to provide quality services leading to efficient, sustainable and continuous growth for all our clients.

It offer the following services under Sustainability domain:

- Project Development (CDM/VCS/GS)
- CSR reporting as per GRI
- CDP Reporting
- GHG accounting (ISO 14064) / Carbon Foot printing
- Carbon Offsets / Carbon Neutrality
- Environmental and Social Impact Assessment (ESIA)
- Feasibility assessments for Renewable Energy Projects

Infinite Solutions has been assigned with the task to carry out the assessment of GHG emissions, define a methodology to be adopted, calculation approach as well as selection of assumptions. Infinite solutions will also provide offsets to make the event carbon neutral.

II. Operational Boundary

The boundaries have been defined inline with ISO 14064 guidelines considering scope 1, scope 2 and scope 3 (partially) separately. The boundary along with emission sources corresponding to scopes are as follows;

Summary of emissions by Source and Scope	
Scope 1 Emissions	**• Fuel Combustion at site** **• Company Vehicles**
Scope 2 Emissions	**Energy (Electricity) – Venue**
Scope 3 Emissions	**• Travel - Local City** **• Travel – Domestic, International** **• Food & Catering** **• Paper & Printed Material** **• Accommodation**

Scope 1: Within the Organizational boundary

- Emissions related to onsite fossil fuel consumption (for DG sets in case of emergency)
- Emissions due to company Vehicles (if used)

Scope 2: Purchased utilities

- Electricity, heating and cooling requirements during the event

Scope 3: Other emissions

- Travel: Event Organisers, Speakers, Delegates and Guest would be travelling to the venue within the city.
- A survey/questionnaire will be developed and data to be collected from guests/organizers for local travel and mode of travel within the city (Local Travel and Travel within India).
- Air Travel for participants travelling from outside India
- Domestic Travel for participants travelling within India via Air travel, Railways.
- For Stay in City: Emissions due to accommodation of the participants/Delegates travelling to the city
- Paper consumption: Paper consumption both at site as well as for pre event related consumptions.

III. Calculation of Emissions

GHG Emissions from Scope 1:

Scope 1 refers to the emissions with the Organizational boundary, for the current event there are two emission sources for scope1;

1. **Emissions due to onsite fossil fuel consumption:** Emissions related to onsite fossil fuel consumption (for DG sets in case of emergency) are monitored. However, there is no DG set at site, thus there are no emissions.
2. **Emission due to company owned vehicles:** Local travel for delegates and employees are by taxi, thus there are no emissions from this source.

Exclusions: No source of emissions have been excluded.

GHG Emissions from Scope 2:

Scope 2 refers to Purchased utility services such as Electricity, heating, cooling.

- Electricity requirement for the project: A total of 3,520kWH electricity was consumed for the event. The monitoring of the electricity consumed is based on the overall consumption monitored for area under use for the event considering usage of Lights and Air conditioner. The units are then calculated based on usage of 9.5 hours for the days of the event.
- Heating and cooling requirements during the event: For the event, the cooling requirements were met by a common cooling unit. The electricity consumed for the same has been considered in the overall electricity requirement, thus this parameter is not applicable.

Exclusions: No source of emissions have been excluded.

GHG Emissions from Scope 3:

Scope 3 refers to other emissions which are indirectly attributed to the event. The emission sources considered are as follows;

- **Catering:** The event has approx. 200 participants and approx. 50 employees/volunteers. The emissions due to food consumption has been calculated based on emissions calculator . A default value of 50% has been considered for Vegetarian and Non-vegetarian preference for lunch.
- **Paper Consumption:** Paper consumption for the event has been calculated based on the print material for event considering both pre event activities as well as during the event. A total of
- **Accommodation:** For the Delegates travelling to the city, accommodation has been considered for the data available. A default value as per DEFRA 2017, has been applied for the assessment. A total of 45 nights for accommodation have been considered to have been engaged for the event.

- **Travel (Local and Outstation):**

  a. **International Travel:** Travel to the city for the purpose of the event by Air has been considered based on the list of delegates travelling from various countries. Air distance between the city of origin and Delhi has been considered. Emission factor as published by GHG Protocol for Long haul flight has been considered for assessment. A total of 69,589 KMs have been travelled considering to-and-fro travel for the event.

  b. **Domestic Travel by Air:** Travel to the city for the purpose of the event by Air has been considered based on the list of delegates travelling from different parts of the country. Air distance between the city of origin and Delhi has been considered. Emission factor as published by GHG Protocol for Domestic flight has been considered for assessment. A total of 209,858 KMs have been travelled considering to-and-fro travel for the event.

  c. **Local Travel by Taxi:** Travel within the city for the purpose of the event by Taxi has been considered based on the total number of participants (200), employees and volunteers (50). A default value of 30 KMs of round Distance has been considered along with an assumption that 75% of the participants used private taxi to commute for the event. Emission factor as published by GHG Protocol for Diesel vehicle has been considered for assessment. A total of 3,263 Miles have been travelled considering to-and-fro travel for the event.

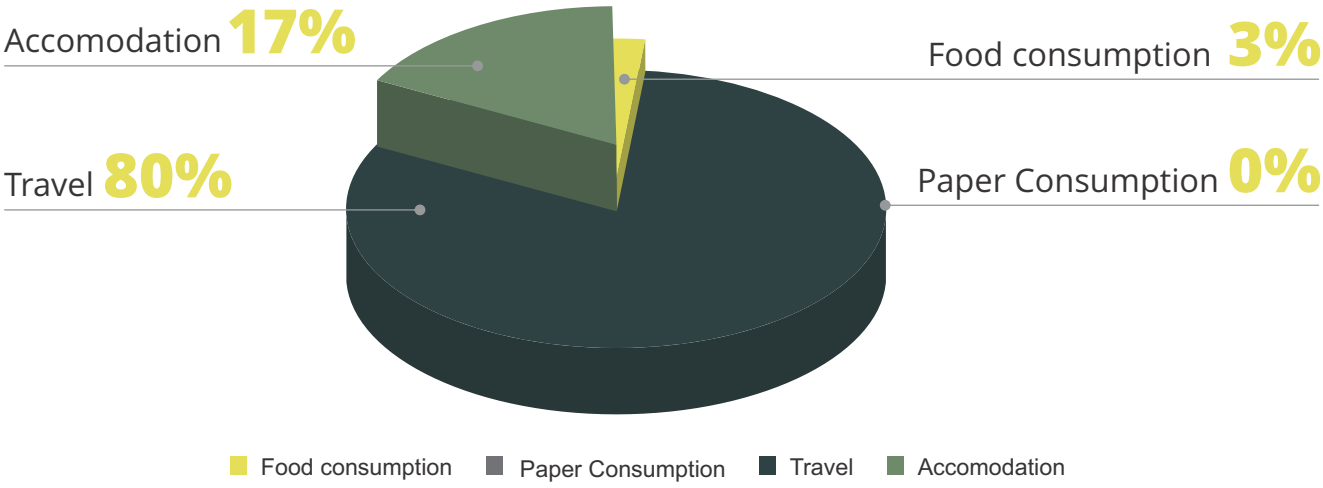
  d. **Local Travel by Metro (Public Transport):** Travel within the city for the purpose of the event by Taxi has been considered based on the total number of participants (200), employees and volunteers (50). A default value of 30 KMs of round Distance has been considered along with an assumption that 25% of the participants used Public Transport (Metro Rail) to commute for the event. Emission factor as published by GHG Protocol for has been considered for assessment. A total of 1399Miles have been travelled considering to-and-fro travel for the event.

Summary of Scope 3 Emissions:

12,500 paper sheets have been consumed for the event.

Sources	tCO2e	% wise
Food consumption	0.66	2.40
Paper Consumption	0.01	0.02
Emission by Accommodation	22.16	80.17
Emission by Travel	4.81	17.41
Total Scope 3 Emissions	27.64	100.00

Scope 3 emissions



IV. Summary of GHG emissions

Sr. No.	GHG Emissions from Sources	Total (tCO2eq)	%
1.	Direct GHG Emissions (Scope 1)	-	-
2.	Indirect GHG Emissions (Scope 2)	3.40	10.64
3.	Other Indirect Emissions (Scope 3)	27.64	86.38
	Total (tonne of CO2-eq)*	**32**	**100**

* The final value has been rounded up as per conservative approach.

V. Offset

A carbon offset is a reduction in emissions of carbon dioxide or greenhouse gases made in order to compensate for/or to offset an emission made elsewhere.

One carbon offset represents the reduction of one tonne of carbon dioxide or its equivalent in other greenhouse gases. Offsets have been purchased and retired for this event.

The project from which the event's carbon footprint would be offset is described below;

Project Title	GS ID	Project Link
100.5 MW Wind Power Project in Madhya Pradesh, India	GS 3969	https://mer.markit.com/br-reg/public/project.jsp?project_id=103000000009191

Project Description:

The project activity is a 100.5 MW wind power project in the state of Madhya Pradesh in India. It generates approx. 176GWh of clean energy to the regional electricity grid.

The project has been playing an important role in helping to meet the country's increasing demand for electricity, reducing CO2 emissions and contributing to its economic growth and to the sustainable development of the local communities. The wind project is owned by Orange Renewable Group.

The project supports the following SDGs;

VI. References

1. ISO 14064-1: 2006, Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals
2. CDM - CO2 Baseline Database : http://www.cea.nic.in/tpeandce.html
3. http://envfor.nic.in/sites/default/files/Low%20Carbon%20Lifestyles_0.pdf; page 31, last accessed on 05th June 2018
4. http://www.ghgprotocol.org/calculation-ves/all-tools
5. DEFRA: https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting
6. http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html
7. http://unfccc.int/2860.php
8. http://www.wbcsd.org/home.aspx
9. http://www.wri.org/