## IDF World Dairy Summit 2022 Achieves Carbon Neutrality

The IDF (International Dairy Federation) World Dairy Summit 2022 which was hosted by NDDB in India was one of the biggest international conferences held so far in the dairy industry. The prestigious event which spanned from 12 to 15 September 2022 was attended by more than 1500 global stakeholders to facilitate discussion and exchange of ideas on the theme of dairy nutrition and livelihood. NDDB took the initiative to make the most of this opportunity and set the tone for initiating a global discussion on how to make dairying a sustainable activity by declaring its intention to make the event itself carbon neutral. Since its inception, this was the first World Dairy Summit that attempted carbon neutrality.

Carbon neutrality is a state which is achieved when the greenhouse gas emissions associated with an entity, product or activity are reduced and offset to zero for a defined duration. To achieve carbon neutrality, the first step is to design ways to capture the sources of emissions for measurement and reduction of emissions at source. Towards this, use of electric vehicles for commuting by road for this event (such as between railway stations, hotels, and event venue) were encouraged. Also, use of carpooling and public transport like EV shuttle/bus were encouraged. The event venue was powered by a 3.45 MW solar plant. To print promotional content, recyclable material was used. All raw food was sourced locally and local people were employed for the event. Single use plastic was avoided through use of glass bottles and providing water dispensers to refill the reusable water bottles/cups. The waste generated was segregated and composted. To further reduce emissions, hotels that were already following sustainable practices and were located in the vicinity of the event were selected for the stay of the delegates. After thorough attempts for reduction at source, the emissions that were inevitable from the activity were offset by securing credits from a project that has reduced or sequestered GHG emissions.

The process of ensuring sufficient data collection for meticulous calculation of emissions during the event entailed foresight into event management and discussion among various stakeholders like event management agency, travel agencies, hotels that hosted the event and the delegates etc.

To capture data of the GHG emissions generated, all delegates were encouraged to fill their travel and accommodation details through a common portal. The travel of farmers from various dairy cooperative societies and representatives from dairy processing plants was coordinated by the milk unions. All the Milk Unions were sent a format through which details associated with the travel of farmers and delegates were collected. This included the number of participants, source, destination, distance, and mode of travel. The invoices of flights and travel imbursement claims were shared with the carbon neutrality partners for assessment and evidence. The third-party event management agency was oriented to keep a track of the vehicles that were arranged for shuttle services and the electricity use and food consumption at the venue was also captured. All these data were shared with Zenith Energy Services, our carbon neutrality partner who calculated the final emissions from travel, food consumption and electricity use according to the emission factors of the source of emissions and arrived at a footprint of 815 t CO2e for the event on the basis of protocols and standards like India Specific Air Transport Emission Factors for Passenger Travel and Material Transport, 2015, India GHG program, Central Electricity Authority: CO2 Baseline Database; Version 17 (Oct 2021) and various carbon footprint calculators.

The 4K Earth Science Private Limited, who have a professionally qualified team of experts well versed with needs, compliance, practices and industry specific regulation requirements were engaged as the third-party services provider to objectively validate, verify, check, audit and report on GHG measures implemented by NDDB for the carbon neutrality of the IDF WDS 2022. For verification of the emissions calculated by Zenith, various documents were shared with 4k Earth Science. These included copies of log book/ record, where the initial and final readings of the electricity consumption was recorded and copies of log book, where the initial and final readings of the DG electricity generation were recorded for proof of electricity consumption at the venue. As the proof of event managed travel, copies of bills paid towards event managed vehicles were shared. Copies of the tickets booked by NDDB/individuals/ Dairy unions were shared as proof for air travel. Copies of bills paid towards food and beverages served at the venue were shared for proof of food consumption at the venue.

On the basis of the proofs shared, the GHG emissions from the event were certified by the 4k Earth Science to be 815 tCO2e. Therefore, to make the event carbon neutral, 815 carbon credits were to be purchased. The credits were made available by Zenith Energy Services from a certified renewable energy project. Once the purchase of the credits was completed, the event got certified and declared to be carbon neutral thus making it the first ever World Dairy Summit to achieve carbon neutrality. This achievement serves as an example and inspiration for the entire dairy sector that if intentions are backed by sincere and aligned efforts through collaboration of all the stakeholders, dairying can indeed be made a carbon neutral activity in the near future.