

NEWSLETTER



From the *Director*

The world is grappling with the adverse impacts of climate change and the concomitant rise in emission of greenhouse gases. We are witnessing first-hand, the serious impact on the Indian tea industry. As a sustainability standard, *trustea* is partnering with the Indian tea industry on mitigation and adaptation strategies to combat climate change. The goal is to create a low carbon tea production regime in India.

Recently, at a seminar in IIT Guwahati, I was pleasantly surprised at the questions asked by Mr. Aneesh Rajendran from IIT Indore about the Trustea Emission Calculator (TEC app). He informed that they use this app for carbon calculation of their tea industry audits and offered suggestions for improvement. Developed by *trustea* and IORF with funding from HUL, this unique app, developed specially for the Indian tea industry, offers a simplified and user-friendly way to calculate the GHG emissions and sequestration of a tea producing entity. The app has two versions, Basic and Advanced. The basic version can give a 95% plus accurate carbon GHG calculation by using the standard data that is maintained by tea producers. For Indian tea specific inputs, like shade tree sequestration, the app has actual Tier 3 level field data generated by *trustea*. Given the focus of *trustea* V3 on regenerative agriculture and energy management, this app will help us to not only to measure GHG emissions but also identify reduction pathways. In our guest features column, we carry a write up from Mr. Rajendran on energy audits.

Like all *trustea* apps, the TEC app is also free to use. TEC can be downloaded from the links as below:

<https://apps.apple.com/in/app/trustea-carbon-calculator/id6504613649>

<https://play.google.com/store/apps/details?id=com.trustea.tec>

We look forward to contributions and feedback from our readers. Please write in to comms@trustea.org.

Rajesh Bhuyan

Guest Contribution



Decarbonising Indian Tea Industry through energy audit & GHG accounting



Aneesh Rajendran

BEE - Accredited Energy Auditor

Industrial Energy Assessment Cell, IIT Indore



Like all other markets, Tea industry also demands low carbon emissions to stick to the sustainability certifications like *truste*. This will enable the estates and tea growers to export low carbon tea to international and corporate FMCG markets and also responsibly commit to the nations contributions towards G20 and Net Zero targets as a key to delay climate change.

Scope of Emissions - Emissions are segregated as Scope - 1 (Direct emissions), Scope - 2 (Indirect emissions due to purchased energy) and Scope - 3 (Indirect emissions due to value chain). A major contribution to Scope - 1 and 2 emissions are from direct emissions due to fuel combustion for the purpose of tea withering, drying, power generation and due to indirect emissions from purchased energy.

Low Carbon Audits - A low carbon audit continued with a Farm to Gate - Green House Gas (GHG) accounting study is a foundation for every industry to have a baseline idea of emissions effected due to extraction and manufacturing processes, thereby creating a thought process to remove or mitigate emissions as a roadmap towards to Net Zero.

Energy Audits - Energy Audit is an effective solution to identify and account these emissions and also identify the gaps with respect to energy losses and drive energy conservation most effectively.

Guest Contribution

Energy Optimization - With our experience in Energy Audits and Energy Efficiency improvements in various type of tea extraction and processing such as CTC, Orthodox, Green Tea, Instant Tea and also blending and packaging of most of the reputed brands in India, Our focus was to help the management to improve Energy Efficiency and lean manufacturing strategies for Tea extraction and processing. We could propose the following best practices to reduce operational costs and reduction in per kg made tea costs as Profit margins for Tea is reducing day by day.

Best Practices -

- Fuel switching to low carbon fuels
- Heat Energy Switching to Solar Thermal
- Electrical Energy switching to Solar PV
- Tea Dryer optimization and modernization
- Withering automation and closed loop control
- Withering heater loss reduction
- Waste Heat recovery
- Strengthening thermal insulations
- Humidifier modernization and automation
- Boiler / Hot Water Generator optimization
- Steam trap selection and diagnosing
- Stream leak arresting
- Condensate recovery techniques
- Compressed air leak arresting
- Upgrade inefficient motors to Energy Efficient IE4 / IE5 motors
- Lighting controls and daylight utilization

Benefits - A typical energy audit combined with GHG accounting in an integrated tea extraction and processing facility at North East India producing CTC and Orthodox teas identified an overall electricity savings of 0.37 Million Units, Coal savings of 260 MT, CNG savings of 20,500 SCM resulting in an annualized monetary savings of 61 Lakhs INR (12% of their energy bill). This could also result in an emission reduction of 18.5% annually.

Note - *trustea* - TEC android application is a highly recommended tool which helped us in various areas of GHG accounting very effectively.

Events Calendar

3 Days. 1 Mission. Stronger Audits.

From April 16-18, we hosted an impactful Lead Auditors Training in Kolkata with our certification partners!



What went down?

- Deep dive into Standard Ver 3.1.0
- System Assurance Protocol & TCMS
- Auditor assessments & key insights

Introducing our newest empanelled certification bodies:
GSCI, GCL, TQ CERT & Baltic Control

Events Calendar



In May, *trustea*, in collaboration with Hindustan Unilever Limited (HUL), conducted a comprehensive MRL workshop focusing on MRL standards awareness, responsible pesticide usage & understanding banned agrochemicals as per FSSAI guidelines attended by 47 small tea growers from Patkai Tea Industries in Tinsukia, Assam.



In June, we conducted a MRL training in Tinsukia attended by 46 STG's from Madhabpur Tea Industries focusing on responsible pesticide use, knowledge on banned chemicals & teaplus tutorial and its key features.



- ✓ Understand the POSH Act, 2013
- ✓ Recognize what constitutes sexual harassment
- ✓ Learn about internal redressal mechanisms
- ✓ Know your rights and responsibilities

***trustea* conducted a webinar** on awareness of creating a safe & respectful workplace for women aligned with POSH requirement. The webinar witnessed an attendance from 39 team members & was hosted by Anandita Ray Mukherjee, System Assurance.



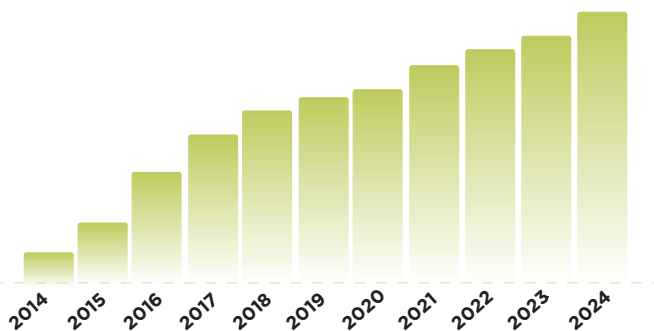
Program Update



971
MN KGS

of tea verified on exit June '25

YEAR-WISE PROGRESSION OF VOLUME (M KGS)



WOMEN

3,65,704



MEN

2,86,716

WORKERS REACHED



882

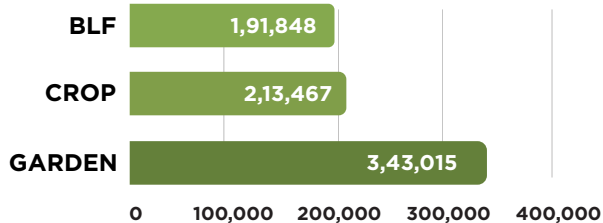
ENTITIES VERIFIED



1,40,218

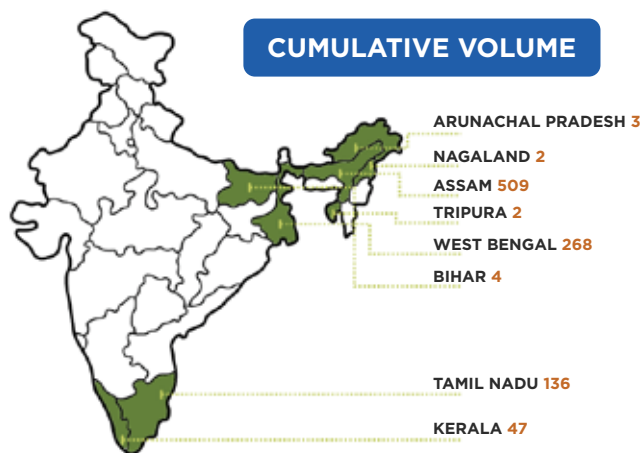
STG'S ADDED

AREA COVERED (in hectares)



Note: The tea garden area include the crop area of the garden and they are not mutually exclusive

CUMULATIVE VOLUME



TOTAL - 971

Note: The depiction of the boundaries in the map is for general illustration purpose only

Achievement



trustea is proud to announce that we have been honoured with the Unilever Sustainability Impact Awards 2025 held at London.

This significant recognition highlights our commitment to driving sustainability in the Indian tea industry. The award was presented to our Director, Mr. Rajesh Bhuyan, by Mr. Heiko Schipper, President Foods, Unilever.

This achievement underscores the importance of collaborative efforts in creating a more sustainable and resilient tea sector. We remain dedicated to fostering positive change and impact.

VOL-20 / APR - JUNE, 2025

trustea at work



For more details on the program get in touch at support@trustea.org.

To share your contributions for the upcoming newsletter issue drop us a mail at comms@trustea.org or sarkar@trustea.org.

Follow Us

