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DyStar®

Committed to Sustainability

CARBON FOOTPRINT REPORT 2012

Foreword
From our CEO

Dear Stakeholders,

It is my pleasure to present DyStar Group's third Annual Greenhouse Gas Emissions Assessment Report based on our global operations in the reporting year 2012.

Measuring and managing GHG emissions from our operations is a key imperative of our sustainability strategy and the company has undertaken a number of initiatives in the last year to measure and reduce our GHG emissions. In the year that has witnessed record-breaking extreme weather events across the world, targeting emission reductions to slow the onset of climate change not only makes environmental sense, but also helps improve our operational efficiency and reduce business costs.

Last year, we had reported that our carbon footprint for the calendar year 2011 rose marginally, in line with the rise in our production levels. However the overall GHG emission intensity per ton of production remained constant.

For calculating the GHG footprint for 2012, we have implemented a new cloud based data gathering system, with real time emission calculation in our global organization. In an effort to continuously improve the accuracy of our reporting, we have expanded the boundary of our footprint to include emission sources that were previously excluded due to their limited impact on our overall footprint.

We are happy to announce that for 2012, we reduced our emissions by 13% as compared to base year 2010 . The GHG intensity of our production also came down by 27% as compared to the base year. This is partly because we shut down two of most carbon intensive production plants and shifted production to other existing plants, where we have invested heavily in state-of-the-art energy efficient production technologies. Our other major production plants have demonstrated significant reductions in their emission intensity in year 2012. In addition, some of the drop in emissions is attributable to the production of a lesser energy-intensive product mix as compared to the product mix of 2010 and 2011.

While reporting our footprint for the year 2011, we also set a voluntary target to reduce our GHG emissions by 20% on a GHG intensity basis by 2020 from 2010 level. While we have achieved our target for the reporting year 2012, our aim is to continue to improve upon our performance consistently. I am confident that with our numerous energy reduction initiatives, we will reduce our GHG emissions while still delivering healthy growth in business, and the best-in-class products and services.

Finally, I cannot close this letter without thanking our employees at production plants and offices across the world for their tireless efforts in ensuring that we continuously achieve our goal of reducing our climate change impact. I am confident that with our robust sustainability team and sustainability programmes in place, DyStar will continue to strengthen its reputation as a trusted brand.

Harry Dobrowolski
Group CEO / President

DyStar Group
Carbon Footprint Report

This report presents DyStar Group's Greenhouse Gas emission inventory for the reporting period starting from January 01, 2012 and ending on December 31, 2012.

This is DyStar Group's third Annual Greenhouse Gas Emission Assessment Report. The assessment was carried out in accordance with the principles and requirements of ISO 14064: 2006 - Part 1 standard and the GHG Protocol by the World Resource Institute and the World Business Council for Sustainable Development.

DyStar first conducted an assessment of GHG Emissions from its operations for the reporting year 2010. The 2010 assessment was selected as the base year for DyStar's emissions, based on which future GHG emission profiles would be evaluated. The 2010 assessment was followed by the assessment of emissions from operations in 2011, which found that DyStar's emissions had increased as compared to 2010. However, the increase in emissions was proportional to the increase in production.

For 2010 and 2011, DyStar focussed on quantifying the most material sources of Scope 1 and Scope 2 GHG emission sources. Fugitive emissions from refrigeration and air-conditioning as well as emissions from chemical reactions were not quantified as these were determined to contribute less than 5 percent of our overall emissions. Our focus remained on strengthening the data collection mechanism that was setup in 2010.

Having gained confidence in our data gathering system, we have broadened the scope of our 2012 footprint to include Fugitive Emissions and Chemical Process Emissions.

However, as in previous years, DyStar has not quantified emissions from Scope 3 sources i.e. emission sources in our upstream and downstream supply chain.

DyStar's GHG emissions in the reporting period were calculated to be 144,699 tonnes of CO_2e. As compared to the base year emissions of 166,509 tonnes CO_2e, we have reduced our emissions by 13 percent.

As in previous years, our emissions continue to be mainly attributable to Scope 2 sources, i.e. purchased steam and electricity. From Scope 1 sources, combustion of natural gas in stationary equipment and process chemical reactions are the major contributors. Despite the inclusion of additional sources of Scope 1 emissions, percentage contribution of Scope 1 emission sources has gone down to 15 percent from 18 percent in previous years.

In terms of distribution of emissions across sites, production facilities continue to account for 96 percent of the total emissions, with offices and laboratories accounting for a marginal 4 percent.

We have voluntarily committed to an organizational level target of reducing DyStar's GHG emissions by 20 percent on an intensity basis (Emissions per ton of production) by 2020. While the emission intensity remained constant between 2010 and 2011; in 2012 emission intensity has reduced by 27% as compared to base year.

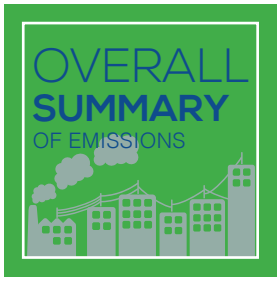
The observed reduction is partly due to the closure of Leverkusen and Cilegon production plants which were highly emission intensive plants as compared to the Group's overall emission intensity. Production from these plants has been shifted to more modern plants, wherein we have invested heavily in state of the art production technology. As a result, products are now manufactured in a much less emission intensive production process.

Our other major dye production plants at Ludwigshafen and Nanjing have demonstrated reductions in their emission intensity by more than 50% as compared to 2010. The production plant at Gabus also reduced its emission intensity marginally. This is partially because of shifting of production from closed plants to these plants, which led to higher economies of scale. In addition, the overall product mix for 2012 was less energy intensive as compared to 2010 and 2011.

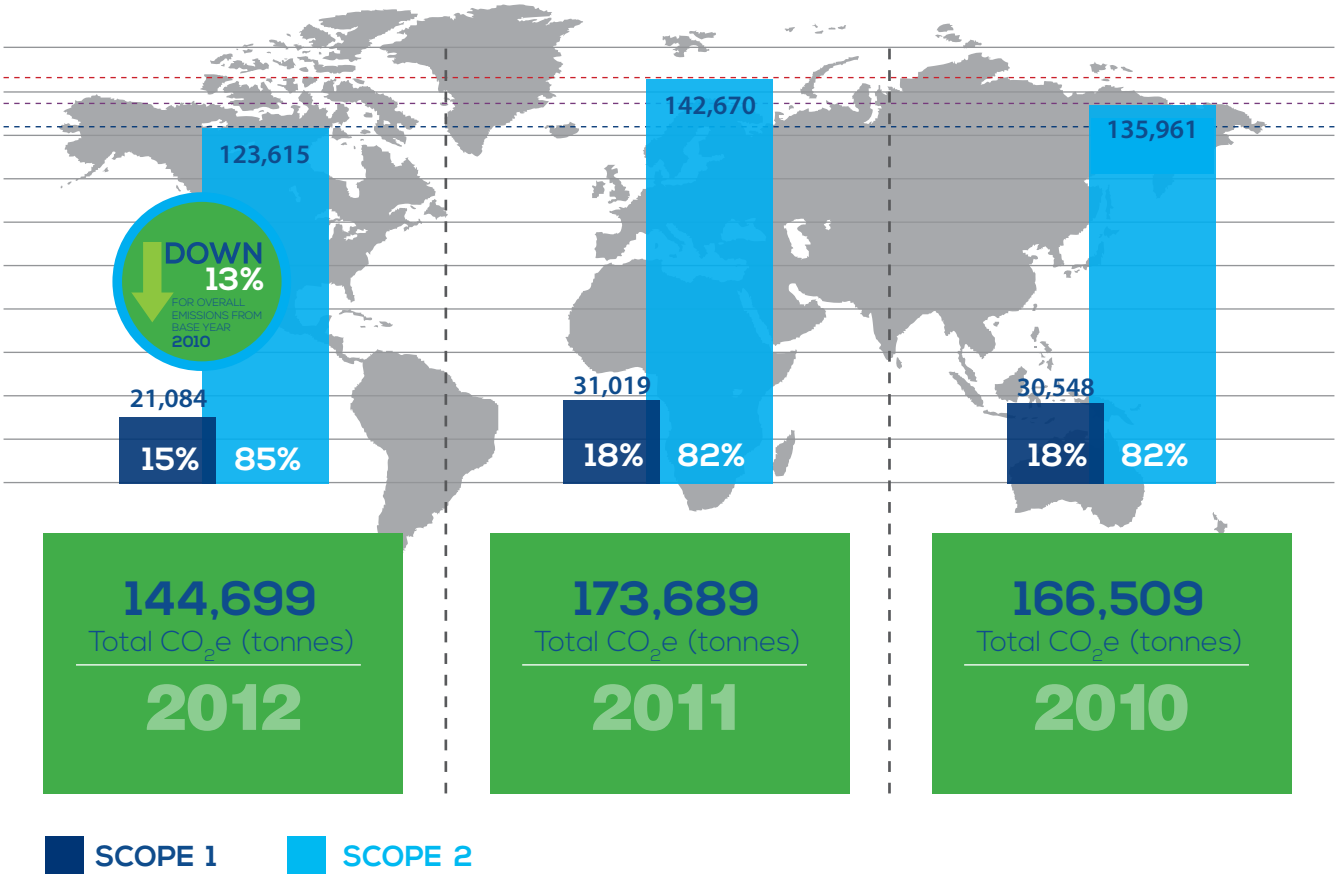
Since the first GHG assessment report, production plants have also researched and deployed a number of measures to reduce the GHG intensity of their processes. We are proud to have achieved and exceeded our GHG reduction target and we will continue to promote improvement in the emission intensity of our operations.

Summary
For the year 2012

TABLE 1: OVERALL SUMMARY OF EMISSIONS



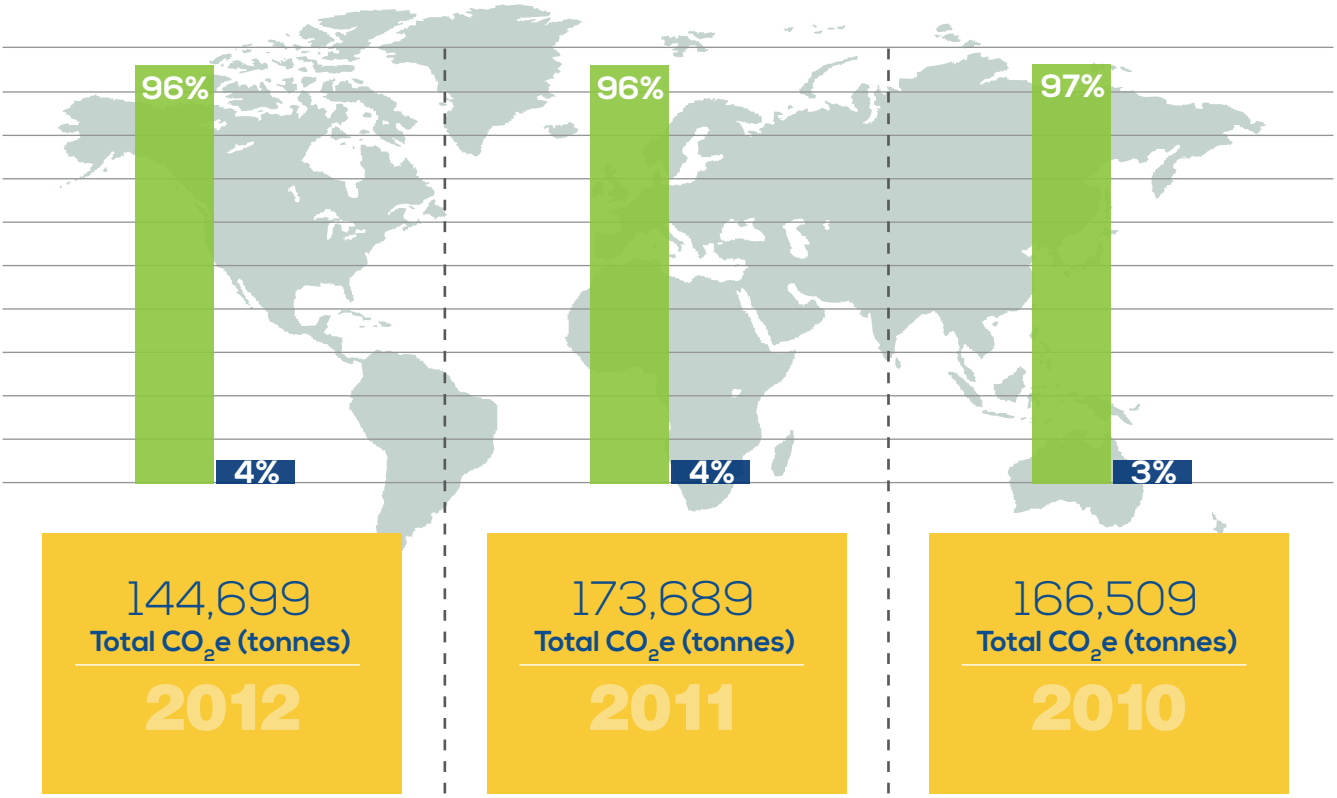
EMISSIONS SOURCE	EMISSIONS (TONNES CO_2e)					
	2012	%	2011	%	2010	%
SCOPE 1	21,084	15%	31,019	18%	30,548	18%
SCOPE 2	123,615	85%	142,670	82%	135,961	82%
Total CO_2e emissions	144,699		173,689		166,509	



Summary
For the year 2012

TABLE 2: EMISSIONS FROM PRODUCTION AND NON-PRODUCTION ACTIVITIES

SITE TYPE	EMISSIONS (TONNES CO_2e)			
	Total 2012	% 2012	% 2011	% 2010
Emissions from Production Sites	138,789	96%	96%	97%
Emissions from Offices and Laboratories	5,909	4%	4%	3%
Total	144,699			

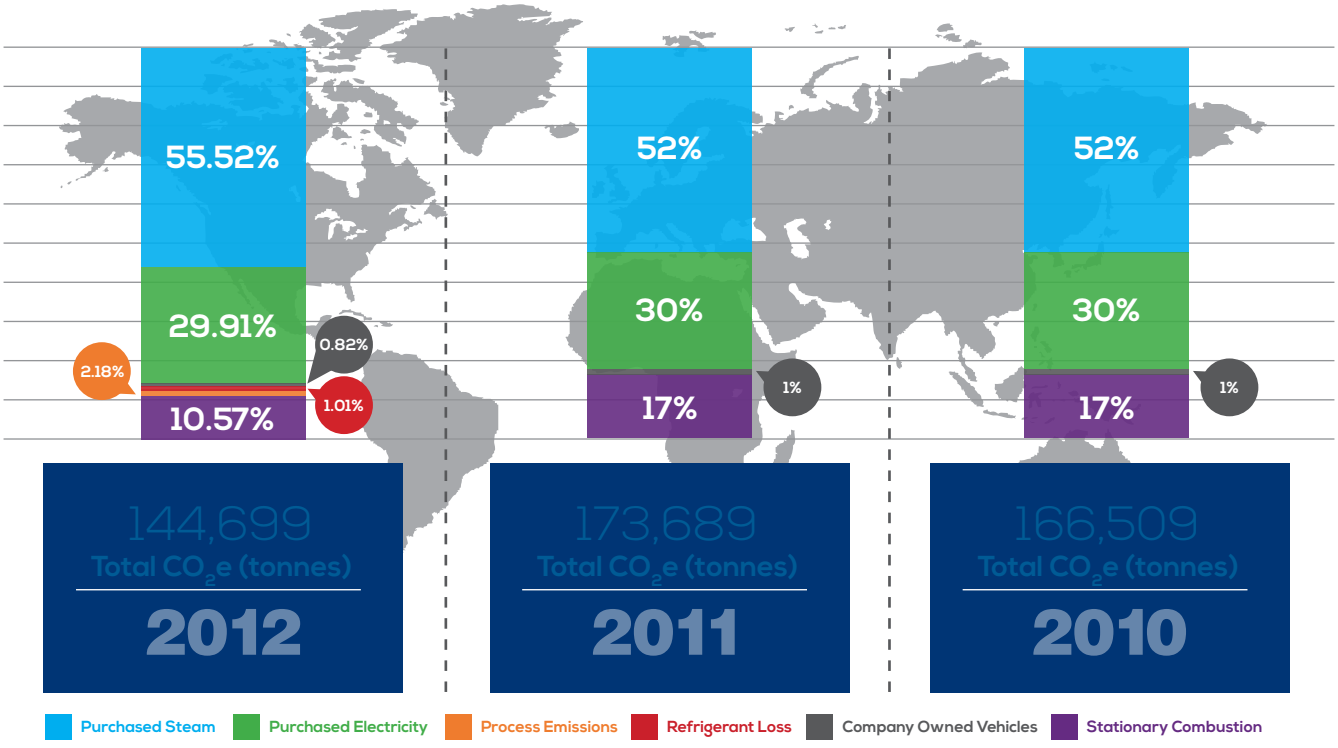


Summary
For the year 2012

TABLE 3: DETAILED SUMMARY OF SOURCES OF EMISSIONS

DETAILED SUMMARY OF EMISSIONS

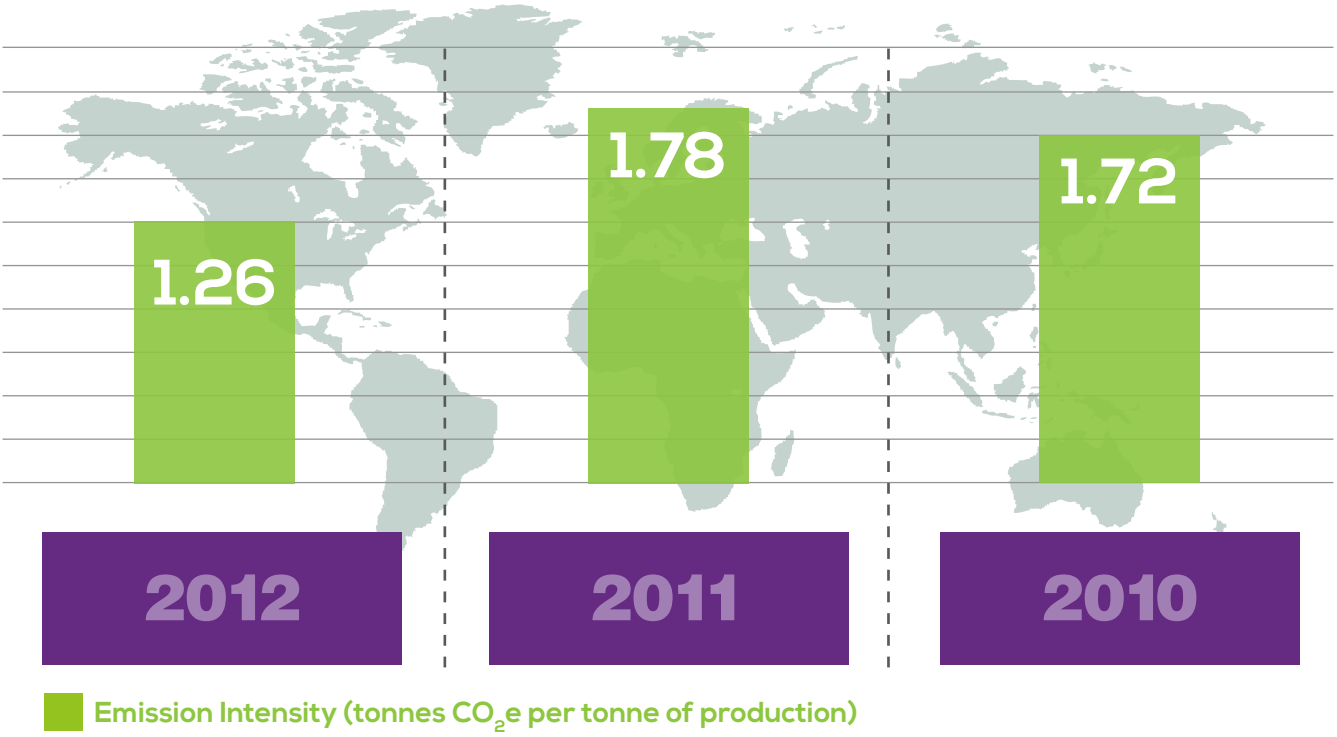
EMISSIONS SOURCE	EMISSIONS (TONNES CO_2e)					
	2012	%	2011	%	2010	%
SCOPE 1						
Stationary Combustion	15,293	10.57%	29,095	17%	28,591	17%
Company Owned Vehicles	1,180	0.82%	1,924	1%	1,957	1%
Refrigerant Loss	1,459	1.01%				
Process Emissions	3,153	2.18%				
Total Scope 1 Emissions	**21,084**	**14.57%**	**31,019**	**18%**	**30,548**	**18%**
SCOPE 2						
Purchased Electricity	43,272	29.91%	52,255	30%	48,794	30%
Purchased Steam	80,343	55.52%	90,415	52%	87,167	52%
Total Scope 2 Emissions	**123,615**	**85.43%**	**142,670**	**82%**	**135,961**	**82%**
Total CO_2e emissions	**144,699**	**100%**	**173,689**	**100%**	**166,509**	**100%**



Summary
For the year 2012

TABLE 4: CO_2e EMISSIONS INTENSITY PER TONNE OF PRODUCTION

SITE TYPE			
	% 2012	% 2011	% 2010
Total CO_2e emissions (tonnes)	144,699	173,689	166,509
Production (tonnes)	115,111	97,429	96,935
Emission Intensity (tonnes CO_2e/tonne product)	**1.257**	**1.783**	**1.718**



Notes

1. Greenhouse Gases (same as 2011 report)

2. Base Year (same as 2011 report)

3. Reporting Principles (same as 2011 report)

4. Organizational boundary
GHG Protocol allows a company to define the organizational boundaries for carbon reporting according to definitions of 'equity share', 'financial control' or 'operational control'.

To give the most representative footprint, DyStar group defines its organizational boundaries using the operational control approach as defined in the GHG Protocol. The emissions of all operations over which the company has operational control. Therefore, all facilities and equipment that the company occupies or operates are included in the assessment.

We have reported on the emissions associated with energy that we buy or generate worldwide.

We have not reported for offices with less than 20 employees as emissions from these offices is estimated to be insignificant while data gathering would have required significant administrative and financial resource

5. Operational boundary
Our report includes direct emissions under Scope 1 and indirect emissions under Scope 2. Direct emissions under Scope 1 include:
- Emissions from combustion of fuel in stationary sources
- Emissions from combustion of fuel in company-owned vehicles
- Fugitive emissions from refrigeration and air-conditioning
- Emissions from process chemical reactions

6. Geographical Scope (same as 2011 report)

7. Conversion factors
Emission factors for Fuel Use and Electricity Purchased from the national grids in various countries have been taken from GHG Protocol's toolset - 'Emission Factors from Cross-Sector Tools v1.3"

Emission factors for steam are dependent on the fuel utilized for generating steam at the steam generator. In addition, if steam is generated from a Combined Heat & Power (CHP) plant, the emission factors are calculated according to a different methodology. For the current assessment, the source of steam generation is not known for the sites. Therefore, for simplicity, steam energy content has been calculated in kWh and the respective Grid Electricity emission factor has been utilized. This approach is in line with the evaluation approach utilized for calculating emissions in previous GHG assessments.

The Global Warming Potentials of the six GHGs have been taken from Inter-governmental Panel on Climate Change's Fourth Assessment Report (2007).

8. Emissions adjustments
Reporting organizations often undergo significant structural changes such as acquisitions, divestments, mergers, opening and closing of emission sources. In addition, there may be changes to quantification methodologies or updating of emission factors as scientific understanding of quantifying GHG emissions develops further. Such changes can alter a company's historical emission profile, making meaningful comparisons over time difficult. To maintain consistency, historic emission data has to be recalculated.

DyStar has defined a robust policy on recalculation of base year emissions which clearly marks if recalculation of base year emissions is required. The rules of the policy are in accordance with the guidelines of GHG Protocol and UK DEFRA's "Guidance on how to measure and report your greenhouse gas emissions"

In 2012, DyStar shifted its data collection system to a cloud based sustainability management solution. As part of this shift, the emission factors for various emission sources were also changed to an updated emission factors database. To present a fair comparison of 2012 emissions with previous years' emissions, emissions for 2010 and 2011 were recalculated using the updated emission factors. The resulting values were marginally higher than emissions reported in 2011 and 2010.

Emission sources	Initial values (tonnes CO_2e)		Recalculated values (tonnes CO_2e)	
	2010	2011	2010	2011
Scope 1	30,548	31,019	30,548	31,019
Scope 2	130,445	137,114	135,961	142,670
Total CO_2e emissions	**160,993**	**168,133**	**166,509**	**173,689**

9. Verification
Our GHG emissions report is a voluntary initiative and has been prepared in accordance with the principles and requirements of ISO 14064: 2006 - Part 1 standard and the GHG Protocol. We have carried out multi - layered quality checks to ensure the accuracy of activity data collected from the sites. Therefore, we believe that we do not require third party verification of emissions data reported.