ESG Data Book

FY **2022 -2023**

SONATA SOFTWARE

sonata-software.com

Table of Contents

Reporting boundary

Sonata Software Limited is a leading Modernization engineering company, headquartered in Bangalore. Sonata Software strives to conduct its business in a profitable and sustainable manner on the basis of clients' requirements. Our vision for Sustainability, 'Make a Deep Impact and Transform Lives', is an extension of our corporate vision of 'Go Deeper. Transform Business with IT'

While we're known for our platform-based digital transformation solutions among leading businesses, there's also another side to us. A side that's relentlessly working towards making the world a better place by empowering local communities and protecting the environment.

This document provides a comprehensive overview of quantitative and qualitative ESG data points concerning Sonata Software. The underlying period for annual information is FY 2022-23.

For more information, check https://www.sonata-software.com/about-us/sustainability

The factbook highlights our performance across the different levels of ESG in our company operations.

Sonata Software has its all offices on lease and majority of its business operations and employees are located in India.

Indian offices

- Bengaluru (3)
- Hyderabad (2)
- Chennai (1)
- Mumbai (2)
- Kolkata
- Delhi
- Pune

Global business entities

For more information on our locations, Please refer https://www.sonata-software.com/about-us/locations

90% of our operations, employees are in Indian offices. All other offices are small in size and have very minimal energy consumption and emissions with minimal operational control. Hence, Indian offices covering over 90% of our operations are covered in Environment Data such as Emissions, Water, Energy, Waste.

Alignment to Sustainability Frameworks

We support and align to world leading Sustainability Frameworks such as the Dow Jones Sustainability Index (DJSI). Our ESG data is aligned to UN Sustainable Development Goals UN-SDGs. The disclosures in the report also draw inspiration from the Global Reporting Initiative (GRI).

We also report to Climate Disclosure Project (CDP) Climate Change, EcoVadis and BRSR (Business Responsibility and Sustainability reporting). We have been invited for Climate Sustainability Assessment (CSA) from DJSI in 2023.

Environmental Performance

Energy

Indicators	Unit	2022-23	2021-22	2020-21	2019-20
Total energy consumption (Purchased electricity, DG power electricity, Fuel)	**MWh**	**3,317.0**	**2,403.0**	**2,527.8**	**6,076.5**
Total purchased electricity consumption	MWh	3,278.2	2,377.2	2,505.5	6,022.4
Purchased Electricity (Non-renewable)	MWh	1,903.6	1,403.4	1,470.3	3,322.4
Purchased Electricity (Renewable)	MWh	1,374.6	973.9	1,035.2	2,700.0
Electricity (DG power)	MWh	28.3	16.2	13.8	35.2
Fuel (Diesel)	MWh	10.5	9.6	8.5	18.9
Energy intensity (Total energy/ revenue)	MWh/INR Cr	0.445	0.443	0.598	1.6

Note: All our office facilities are leased. Two offices in Bangalore receive renewable electricity from a reliable hydroelectric source. The emissions reduction from this renewable electricity is not accounted in our GHG inventory.

Emissions

GHG Emissions

Indicators	Unit	2022-23	2021-22	2020-21	2019-20
Scope 1	**t CO2e**	**177.11**	**60.26**	**169.32**	**282.12**
Fuel Consumption	t CO2e	11.02	10.11	9.14	19.86
Fugitive Emission	t CO2e	161.04	50.16	160.16	262.24
Company Cab travel	t CO2e	5.03	NA	NA	NA
Fugitive emissions – CO2 in fire extinguishers	t CO2e	0.02	0.02	0.02	0.02
Scope 2	t CO2e	2678.18	1933.65	2013.46	4967.25
Purchased electricity	t CO2e	2654.99	1922.72	2005.73	4938.38
Captive DG set electricity	t CO2e	23.20	10.94	7.73	28.87
Scope 3	t CO2e	4215.26	1207.43	850.97	5945.72
Purchase Goods & Services	t CO2e	1166.16	558.73	304.99	1577.52
Transmission and Distribution (T&D) losses	t CO2e	458.62	384.54	400.89	1033.60
Waste Generated in Operations	t CO2e	2.67	2.99	NA	2.35
Business travel	t CO2e	733.44	96.68	12.77	1041.49

Employee commuting	t CO2e	1701.88	NA	NA	2276.31
Employee teleworking	t CO2e	152.50	164.49	132.33	NA
Total emissions	**t CO2e**	**7070.55**	**3201.35**	**3033.75**	**11195.09**
Emissions Intensity (t CO2 e/ revenue in Cr)	t CO2 e/INR Cr	0.949	0.576	0.72	2.99

3rd Party Assurance of GHG inventory is done for FY 2019-20, FY 2021-22 and FY 2022-23.

The assurance certificate of GHG emissions FY 2022-23 is provided in Annexure 1

Air emissions (other than GHG emissions)

Indicators	Unit	2022-23	2021-22
NOx	Mg/nm3	500	458.6
SOx	Mg/nm3	279	261.1
Particulate matter (PM)	Mg/nm3	904	830.7

Water

Indicators	Unit	2022-23	2021-22
Water withdrawal (a + b + c + d)	Kilo liters	17939.80	17187.16
a) Surface water	Kilo liters	NA	NA
b) Groundwater	Kilo liters	1557.00	1372.00
c) Third party water	Kilo liters	16382.00	15815.00
d) Seawater / desalinated water	Kilo liters	NA	NA
Water consumption	Kilo liters	17939.80	17187.16
Water recycled	Kilo liters	8126.00	10662.00
Water recycling percentage	Percentage	45	62
Total Water discharged	Kilo liters	17939.80	17187.16
Discharge with No treatment	Kilo liters	9813.80	6335.16
Sent to builder STP for treatment	Kilo liters	8126.00	10662.00
Water intensity (Water consumed / Revenue)	Kilo liters/ INR Cr	2.41	3.09

Waste Generated

Indicators	Unit	2022-23	2021-22
Paper	Tonne	0.015	0.2
Plastic	Tonne	0.25	0.2
E waste	Tonne	5.187	2.015
Batteries	Tonne	0.033	12.4
Other Hazardous waste (Oil for DG sets)	Tonne	0.07	0.132
Total Waste generated	**Tonne**	**5.555**	**14.947**

Waste disposal

Indicators	Unit	2022-23	Disposal Method	2021-22	Disposal Method
Paper	Tonne	0.015	Through Municipal corporation	0.2	Through Municipal corporation
Plastic	Tonne	0.25	Through Municipal corporation	0.2	Through Municipal corporation
E waste	Tonne	5.187	Through certified recyclers	2.015	Through certified recyclers
Batteries	Tonne	0.033	Through certified recyclers	12.4	Through certified recyclers
Other Hazardous waste (Oil for DG sets)	Tonne	0.07	Through certified recyclers	0.132	Through certified recyclers
Total Waste generated	**Tonne**	**5.555**		**14.947**	

Sustainability Initiatives

Sr. No	Initiative undertaken	Details of the initiative	Outcome of the initiative
1	Renewable Energy in our Energy Mix	Our two offices in Global village Bangalore currently procure 100% Green Energy.	Increasing Renewable energy in overall energy consumption.
2	IGBC Platinum Certification	The company has received IGBC certification to its newly started Tower F building in Global Village. This includes use of renewable energy, automation in lighting and other utility, use of	These initiatives will achieve 10-15% reduction in utility cost. More sustainable office.

		environment friendly material, more safety to occupants etc.	
3	Surveillance of utility	After regular business hours, maintaining constant surveillance of the floor and turning off the lights.	Reduction in energy consumption. Saving in energy cost
4	Air conditioning	Switching off the air conditioning units during off-peak hours and on weekends.	Reduction in energy consumption and emissions. Saving in energy cost
5	Routine maintenance	Performing routine maintenance on UPS and AC plants to ensure optimal functioning of the equipment.	Increased efficiency
6	Reusable Ceramic Cups	Use of Ceramic Cups for the replacement of Paper Cups in canteen and other office area.	Reduce the amount of waste produced. Savings of 10000 per month
7	Organic Bio-tech Products for Housekeeping Consumables	Use of ecofriendly and safe products for Housekeeping activity	Safety for workers. Savings of 5000/month
8	First Aid – Box	EHS- safety – Mandatory	Ensure Safety at office
9	Water aerators	Use of Water aerators for more efficient water use.	Water saving – up to 30% Consumption to normal flow Taps
10	The HUIDA bathroom water management system	We use this system for the washrooms of offices	considerably lowers water use when compared to a standard commode flush.

Social Performance

Employee

Indicators	Sub parameter	Unit		2022-23	2021-22
Number of employees	**Total**	**Number**		**6434**	**5381**
	Male	Number		4486	3874
	Female	Number		1948	1507
	Under 30 years old	Male	Number	1292	NA
		Female		877	NA
	30-50 years old	Male	Number	3039	NA
		Female		1018	NA
	Over 50 years old	Male	Number	316	NA
		Female		62	NA
Number of Permanent employees	Total	Number		5605	4681
	Male	Number		3894	3370
	Female	Number		1711	1311
Number of other than Permanent employees	Total	Number		829	700
	Male	Number		592	504
	Female	Number		237	196
Number of workers	Permanent	Number		0	0
	Total other than Permanent	Number		137	123
	Male (other than Permanent)	Number		121	114
	Female (other than Permanent)	Number		16	9
Board of Directors	Total	Number		7	7
	Male	Number		6	6
	Female	Number		1	1
Key Management Personnel	Total	Number		4	3
	Male	Number		3	2
	Female	Number		1	1
	Male	Number		2012	1043
	Female	Number		835	561

Number of new employees hired	Internal Movement/Positions filled internally	Number	149	116
	External Hiring	Number	2847	1604

Maternity leave

Indicators	Unit	2022-23
Employees covered by Maternity Benefits	Percentage	100
Rate of return to work that took maternal leaves	Percentage	100
The retention rate of employees that took Maternal leave	Percentage	100

Employee turnover rate

Indicators	Sub parameter	Unit	2022-23	2021-22
Employee Turnover rate	Total	Percentage	16	27
	Male	Percentage	17	28
	Female	Percentage	15	24

Gender-pay indicators

Median remuneration/ salary/ wages of respective category.

Indicators	Sub parameter	Unit	2022-23
Employees	Male	INR	12,88,750
	Female	INR	9,00,000

Training and Education

Indicators	Sub parameter	Unit	2022-23	2021-22
Employees	Number	Total number of training	556	NA
Workers	Number	Total number of training	2	NA
Employees who received a regular performance and career development review.	Total	Number of employees	5605	4762
	Male	Number of employees	3894	3297
	Female	Number of employees	1711	1465
Training on policies like vigil mechanism, anti-	Total	Percentage	100	100

bribery, ethics etc. during induction.				
Average hours per FTE of training and development	Total	Hours	100	60

Employee Development Programs

Program	Description	2022-23
Campus Hire Program (Technical and Non-technical).	Enable the new hire to enhance their skills in some key technical and behavioral areas. Participants will have a mindset shift and be more responsible, taking ownership and be result oriented and would learn how to portray themselves professionally to the client and to business being a brand ambassador of Sonata.	
% of FTEs participating in the program		10
Unified Full Stack Programs	This is a unique framework to make you full stack digital ready professional. This framework supports our Platformation TM agenda to transform client's business using platforms. This program is designed for all Developers in various competencies, Designers, Architects & Project Managers.	
% of FTEs participating in the program		70

FTEs: Full-Time Equivalents is the number of working hours that represents one full-time employee during a fixed time period.

Program	Description	2022-23
Performance Appraisal	**PACE (**Performance and Career Enablement) is Sonata's Performance and Career Management Program. It has been designed to align individual goals and aspirations to Sonata's priorities and growth, along with Mid Term review as well.	

Benefits provided to permanent and temporary employees

Indicators	Sub parameter	Unit	2022-23	2021-22
Health Insurance	Permanent employees	Yes/No	Yes	Yes
	Other than permanent employees	Yes/No	Yes	Yes
Accident Insurance	Permanent employees	Yes/No	Yes	Yes
	Other than permanent employees	Yes/No	Yes	Yes
Maternity leave	Permanent employees	Yes/No	Yes	Yes
	Other than permanent employees	Yes/No	Yes	Yes
Sabbatical	Permanent employees	Yes/No	Yes	Yes
	Other than permanent employees	Yes/No	Yes	Yes

Transition assistance

Indicators	Unit	2022-23	2021-22
Transition assistance programs to facilitate continued employability and the management of career endings resulting from retirement or termination of employment?	Yes/No	Yes	Yes

Occupational Health and Safety

Indicators	Sub parameter	Unit	2022-23
Training on Health and safety	Male	Number of employees	2203
	Female	Number of employees	1009
	Total	Number of employees	3212
	Total	Percentage	49.9
Lost Time Injury Frequency Rate (LTIFR)	Employees	per one million-person hours worked	0
	Workers	per one million-person hours worked	6.33
Total recordable work-related injuries	Employees	Number of incidents	0
	Workers	Number of incidents	2

Human Rights assessment

Indicators	Sub parameter	Unit	2022-23	2021-22
Percentage of operations that have been subject to human rights reviews or human rights impact assessments	-	Percentage	100	NA
Training on human rights issues and policy	Permanent	Number of employees	1852	4031
	Other than Permanent employees	Number of employees	167	NA
	Other than Permanent Workers	Number of employees	137	123
Percentage of employee who got more than or equal to minimum wages	Permanent	Percentage	100	100
	Other than Permanent employees	Percentage	100	100
	Other than Permanent Workers	Percentage	100	100

Human Rights training and complaints

Indicators	Sub parameter	Unit	2022-23
Number of Complaints	Sexual Harassment	Number	0
	Discrimination at workplace	Number	0
	Child Labour	Number	0
	Forced Labour/ Involuntary Labour	Number	0
	Wages	Number	0
	Other human rights related issues	Number	0
Percentage of offices that were assessed on	Child labour	Percentage	100
	Forced/involuntary labour	Percentage	100
	Sexual harassment	Percentage	100
	Discrimination at workplace	Percentage	100
	Wages	Percentage	100
	Others – please specify	Percentage	100
Training on ESG (Environment, Social, Governance)	Male	Number of employees	498
		Percentage of Total Male Employees	11.10%
	Female	Number of employees	232
		Percentage of Total Female employees	11.91%
	Total	Number of employees	730
		Percentage of Total Employees	11.35%
Training on Information security (InfoSec)	Male	Number of employees	387
		Percentage of Total Male Employees	8.63%
	Female	Number of employees	144
		Percentage of Total Female employees	7.39%
	Total	Number of employees	531
		Percentage of Total Employees	8.25%
Training on POSH (Prevention of Sexual Harassment)	Male	Percentage of Total Male Employees	538

		Percentage of Total Male Employees	11.99%
	Female	Number of employees	220
		Percentage of Total Female employees	11.29%
	Total	Number of employees	758
		Percentage of Total Employees	11.78%
All Employees are required to undergo POSH, ESG, Infosec training. All new joiners undergo POSH, ESG, Infosec training during onboarding			

Human Rights Due Diligence

Sonata has conducted the Human Rights Due Diligence (HRDD) exercise for the workforce to identify the prevalent human rights risk in the company. The HRDD enabled the company to focus our attention on the most severe human rights issues identified and develop the right mitigation strategies for them. The assessment for SSL was conducted through a mix of online and offline surveys for the important HR issues prevalent in the IT/Software sector. The survey was prepared considering the principles of SA8000, ILO and UNGC which includes the human rights risk prevalent in different geographies around the world.

Following Human Rights issues were covered in the Due Diligence process.

- Working Conditions
- Labor Rights
- Right to Privacy
- Health, Safety and Well-being
- Fair Remuneration
- Freedom of Speech
- Workplace Discrimination & Harassment
- Learning & Development
- Diversity & Inclusion

Category	No. of responses	Mode of Engagement
Executive Directors & KMPs (Key Management Personnel)	4	Online
Employees	2395	Online
Workers (On site Vendors/Suppliers)	65	Offline

Privacy Protection

Indicators	Sub parameter	Unit	2022-23
Use of Customer Data	Number of government requests in the last fiscal year	Number	0
	Percentage of requests resulting in disclosure in the last fiscal year	Number	0

Customer relationship management

Indicators	Sub parameter	Unit	2022-23
CSAT Survey (Customer Satisfaction Score)	No of people reached	Number	79
	No of people responded	Number	54
	Results	Average CSAT Score out of 5	4.1
NPS Survey (Net Promoter Score)	No of people reached	Number	450
	No of people responded	Number	205
	Results in KPI/Summary of survey results	NPS Score in Percentage	40
Number of consumer complaints	Data Privacy	Number	0
	Advertising	Number	0
	Cyber-security	Number	0
	Delivery of essential services	Number	3
	Restrictive trade practices	Number	0
	Unfair Trade Practices	Number	0
	Other	Number	0

Indicators	Sub parameter	Unit	2022-23	2021-22
Use of Customer Data	Number of government requests in the last fiscal year	Number	0	0
	Percentage of requests resulting in disclosure in the last fiscal year	Percentage	0	0

Supply chain

Indicators	Sub parameter	Unit	2022-23	2021-22
Total procurement spends on local suppliers		Percentage	100	100
Total number of local suppliers		Percentage	100	100
Sustainability Assessment of value chain partners		Percentage	4	NA
Percentage of input material sourced from suppliers	MSMEs/ small producers	Percentage	2	3
	Within the district and neighboring districts	Percentage	100	100

Employee engagement

Events	Type	Attendees
National Road Safety Awareness Session	Training	45
Office EHS Training	Certification Training	22
Office EHS Safety webinar	Training	450
Water Supply- A humongous task in BANGALORE	Training	514
Supplier awareness on ESG	Training	7
Water day quiz	Online Quiz	442
Environment day awareness and visit to Ragi Halli Banergatta	Training and visit	60
Environment day quiz	Online Quiz	785
Webinar: Pro Wilderness - An Awareness session on Biodiversity	Training	71
Webinar: Pro Wilderness - An Awareness session on Biodiversity	Training	49
Happy Relationships webinar	Training	1493
NSM Safety week Painting competition	Employee engagement	12
Total		3950

Corporate Social Responsibility

Indicators	Unit	2022-23	2021-22
Total CSR expense	INR Cr	7	6

CSR Projects and social impact

Sr No	Projects	Focus area	Description	Total impact
	SSL			
1	Agastya International Foundation	Education and the Environment	Enhancement of user Experience for Application for Mobile Science Labs	4020
2	Industree Foundation	Traditional Art and Handicrafts	Developing an Online Repository for Artisans to store Designs and Products for Artisans (Co-Create)	3500+
3	MAP Foundation	Traditional Art and Handicrafts	Developing a Museum Management System- Phase 2	4000
4	Indian National Trust for Art and Cultural Heritage (INTACH)	Preservation of Cultural Heritage	Developing a Digital Platform for Someshwara Temple in Ulsoor, Bengaluru	Promotion of cultural heritage. Increased accessibility and Enhanced visitor experience of temple website. 1000+
5	ISDM	Education and the Environment	Revamping their existing website into a new flexible & user-friendly responsive website	1000+
6	Application support for INTACH, KRITI, NITK SNEHA TRUST, SENSE INDIA	Application support	Schedule VII, Promoting Education	50

Sr No	Projects	Focus area	Description	Total no of beneficiary
	For SITL			
1	MAP	Traditional Art and Handicrafts	Contribution towards Physical Opening of Museum (25 lakhs)	4000
			Contribution towards MAP-SITL Art Conservation (10lakhs)	

			Visible/Invisible Program for Women inclusion (25 lakhs)	
2	Sneha Trust	Education and the Environment	To Improve the quality of education and access to opportunities	225
3	Samatvam trust	Healthcare	To Act as a crowd funding platform for Samatvam Programs	13
4	Roshni Trust	Healthcare	Providing services in Mental Health by creating awareness to eradicate stigma attached to psychiatric issues to underprivileged communities	1321 sessions conducted
5	Academy of Family Physicians of India [AFPI]	Healthcare	To support primary Healthcare Leadership fellowship	7 physician-leaders in the primary care landscape impacted the 53009 population for healthcare
6	Sri Kamala & Sri Venkappa M Agadi Trust [SKSVMA]	Education and the Environment	Providing Scholarship to the rural women students of SKSVMA college of engineering	6
7	Friends of Moral Re-Armament [FMRA]	Preservation of Cultural Heritage	To improve Leadership among the Rural communities who hail from economically, socially, and politically marginalized backgrounds	19
8	Deccan Heritage Foundation	Preservation of Cultural Heritage	To preserve heritage by supporting restoration of Rang Mahal Hyderabad and Lecture of Prof Molly Atkins at Rang Mahal Garden at Hyderabad in Jan 23	2235
9	OGQ- Foundation of Promotion of Sports and Games	Promote rural sports, nationally recognized sports, Paralympic sports, and Olympic sports.	To support training of athletes for Olympics 2024 and Paralympics	23
10	Sweet heart Foundation	Disaster management, including relief,	To provide relief to Orissa flood victims	350

		rehabilitation, and reconstruction activities		
11	Hyderabad Public School	Promotion of Education	Promotion of Science and Technology among young students	8000
12	Farmers for Forest (Efficient Ecosystem Protection Association)	Protection of environment	empowering the marginalized farmers by improving their income along with reducing the carbon emissions to environment by planting 6000 trees over 15 acres of unused and degraded land.	Creation of over 140 days of rural employment Improvement in biodiversity of area by plantation of 6000 trees
13	Centum foundation	Promotion of Education	Promotion of education and enhancement of employment of underprivileged diversified youth in IT sector. Under this engagement, Full Stack Development course will be provided to 500 beneficiaries which includes 400 women, especially abled, 100 rest of under need students, along with placement assistance.	500
	Under SSSL			
1	Agastya International Foundation	Education and the Environment	Development of Teacher-Student Collaboration platform	4020

Third party social impact assessment is done for CSR projects. Refer Certificate in Annexure 2

Governance

Board of Directors Composition

Indicators	Unit	2022-23	2021-22
Total board size	Number	7	7
Executive directors	Number	2	1
Independent directors	Number	3	3
Other non-executive directors	Number	2	2
Women in board	Number	1	1
Gender Diversity % in board	Percentage	14%	14%

Board Training and Education

Indicators	Unit	2022-23
Board of Directors	Total number of training	2
Key Managerial Personnel	Total number of training	2

Stakeholder Feedback Survey Results

Survey name	Type of survey	Target audience	No of people reached	No of people responded	Results in KPI/Summary of survey results
Administration and Facilities survey	Service Satisfaction Score	Employee	6000	620	4.37 out of 5
Employee survey	Employee Satisfaction survey	Employee	6000	75%	88% of the respondents felt that Sonata is a 'great place to work'
Supplier Survey	External customer Satisfaction-Procurement survey	Supplier	135	118	99% overall satisfaction
Procurement Survey	Internal customer Satisfaction-Procurement survey	Employee	172	84	98% overall satisfaction

Economic Performance

Economic value generated

Indicators	Unit	2022-23	2021-22
Total Sales Revenue	INR Cr	7449.1	5553.3
Other Income	INR Cr	71	102
Earnings before tax	INR Cr	597	500
Taxes reported	INR Cr	145	124
Effective tax rate	Percentage	24.29	24.8
Direct economic value generated	**INR Cr**	**7520**	**5655**

Economic value distributed and retained

Indicators	Unit	2022-23	2021-22
Total operating costs	INR Cr	5905	4347
Total employee-related expenses (salaries and benefits)	INR Cr	933	737
Payments to providers of capital	INR Cr	19	18
Payment to government	INR Cr	167	145
Community investments	INR Cr	7	6
Economic value distributed (sum of above)	INR Cr	7031	5253
Economic value retained	INR Cr	489	402

ESG Vision and targets

Material Issues	Target and target year
Climate change (Climate risk & GHG Emissions)	Aim to become Carbon Neutral by FY 2030
	Aim to become Net Zero by 2040
TCFD and SbTi Commitment	Publish TCFD report for FY23 Target to Sign up for SbTi (Science Based Targets) by FY 2024
Resource Management (Water & Waste)	Aim to implement Single-use-Plastic-Free (SuPF) Certified Company for Bengaluru Office by FY 2024
Supply Chain Management	Target of Training 100% Tier-1 suppliers on ESG best practices by FY 2024
	Aim for Assessment of 10% Tier-1 suppliers by FY 2024, to be gradually increased on Year on Year (YOY) basis
	Aim for 100% Tier 1 suppliers on ESG compliance by FY 2023-24
Corporate Citizenship & Philanthropy	Target to reaching out to 1 million beneficiaries through CSR initiatives by 2030
	Conduct CSR Impact Assessment for eligible projects from FY 2024 onwards
Diversity and Inclusion	Aim to conduct 100% mandatory training and awareness programs for People Managers on inclusivity by FY 2024
	Aim to maintain 50% of entry level hiring to be women by FY2025
	Aim to increase share of women in total workforce to 34-35% by 2025
Governance	Target to become UNGC Signatory by FY 2024
	Setup ESG Council and working group by FY 2024 which shall monitor and review the ESG progress periodically

Certifications and awards

Certifications

Sr No.	Indicator	Description
1	IGBC Platinum Certificate	IGBC Green Interiors (New Interiors) #GI233397 Sonata Software, Bengaluru
2	ISO9001	Quality Management System
3	ISO27001	Information Security Management System
4	ISO20000-1	Service Management System
5	CMMI	Best Practices for Product Engineering Development and Quality for ensuring predictable outcomes and driving continuous improvement

Awards

Sr No.	Indicator	Description
1	Golden Peacock 2022	Award for Corporate governance
2	Azure Expert Managed Service Provider	Microsoft Certification demonstrating the technical capabilities in the Microsoft Cloud Partner Program.

Recognition

Sr No.	Indicator	Description
1	Microsoft Supplier Prestige Awards	Awards recognized suppliers that exemplify the pillars of strategy, priority, agility, and modernization in the arenas of sustainability, accessibility, inclusion, representation, and community.
2	TUI Green IT Awards Special recognition	In addition to the three winners, Sonata Software received a special recognition by the jury for their commitment to sustainability. There are more than 2000 IT partners and suppliers of TUI.

CDP Rating 2022

Sr No.	Indicator	Description
1	CDP Climate Change	B
2	CDP Supplier engagement	Leadership rating (A-)

Policies

Sr No	List of policies	Status	Link
1	Privacy policy	Publicly available	https://www.sonata-software.com/privacy-policy
2	Code of Fair Disclosure	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/code-for-fair-disclosure.pdf
3	Code of conduct for Senior management & Board of Directors	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/Code-of-Conduct-for-Directors-and-Senior-Management-Employee.pdf
4	Insider Trading	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/code-of-conduct-for-prevention-of-insider-trading.pdf
5	Dividend distribution policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/dividend-distribution-policy.pdf
6	Femiliarization program for ID	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/Familiarization_programme.pdf
7	Policy on determining material subsidiaries	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/policy-on-determining-material-subsidiaries.pdf
8	Vigil mechanism	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/Sonata_Vigil_Mechanism.pdf
9	Third Party Code of Conduct and Business Ethics	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/Sonata-Third-Party-Code-of-Conduct-and-Business-Ethics-2016.pdf
10	Archival policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/SSL_Archival_Policy.pdf
11	Business Responsibility Policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/SSL_Business_Responsibility_Policy.pdf
12	Policy on determining	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/SSL_Policy_for_Determining_Material_Information.pdf

	material information		
13	Terms and conditions of appointment of Independent Directors	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2019-09/Terms_and_Conditions_of_Appointment_of_Independent_Directors.pdf
14	Risk management policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2021-08/risk-management-policy.pdf
15	Policy on Related party transactions	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2022-01/policy-on-related-party-transactions.pdf
16	POSH Prevention of Sexual Harassment	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2022-01/posh-policy_0.pdf
17	CSR Policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2022-10/corporate-social-responsibility-policy.pdf
18	Supplier Code of Conduct	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2023-05/coc_supplier_ve.pdf
19	Code of Business Conduct and Ethics Policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2023-05/code_of_business_conductethics.pdf
20	Equal Opportunity, Diversity & Inclusion Policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2023-05/dei_policy.pdf
21	EHS Policy (Environment Health Safety)	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2023-05/ehs_policy.pdf
22	Human rights policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2023-05/human_rights_policy.pdf
23	Sustainability policy	Publicly available	https://www.sonata-software.com/sites/default/files/financial-reports/2023-05/sustainability_policy.pdf
24	Cybersecurity policy	Internally available	Internal document
25	BCP (Business Continuity Policy) policy	Internally available	Internal document

26	Tax policy	Internally available	Internal document
27	Global Anti-Corruption and Anti-Bribery Policy	Internally available	Internal document
28	Annual Executive Health Check-up Policy	Internally available	Internal document
29	Variable Pay Policy	Internally available	Internal document
30	Maternity Leave Policy	Internally available	Internal document
31	Leave Policy	Internally available	Internal document
32	WFH Policy	Internally available	Internal document

Reports

Annual Report FY22-23

https://www.sonata-software.com/sites/default/files/financial-reports/2023-07/sonata-software-limited-annual-report-2022-2023.pdf

Business Sustainability and Responsibility Report FY22-23

https://www.sonata-software.com/sites/default/files/financial-reports/2023-07/brsr.pdf

TCFD Report FY22-23

https://www.sonata-software.com/sites/default/files/inline-images/csr/tcfd_report_fy2022_23.pdf

Annexure

Annexure 1

GHG Inventory Verification Report Reporting Year: 2022/23

Document type: Verification Report
Project Reference No. ESG.23.006_GHGV_Sonata

Date:
June 27, 2023

GHG Inventory Verification Report
Reporting Year: 2022/23*

*Apr 1, 2022 to Mar 31, 2023 (including both dates)

Issued to:	Submitted by:
Sonata Software Ltd.	Earthood Services Pvt. Ltd.
SONATA SOFTWARE	Earthood

Description **Carbon Inventory Verification Report FY2022-23 for Sonata Software Ltd.**

Project Ref **ESG.23.006_GHGV_Sonata**

Revision No	Date	Description	Verified by	Checked by	Approved by
Rev_00	31/05/2023	Draft Issued for review	Abhishek Namdeo	Ashok Gautam	Deepika Mahala
Rev_01	27/05/2023	Editorial Revisions	Abhishek Namdeo	Ashok Gautam	Deepika Mahala
Rev_02	27/05/2023	Editorial Revisions	Abhishek Namdeo	Ashok Gautam	Deepika Mahala

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CONTENT

TABLES

FIGURE

GLOSSARY

Carbon Inventory	List of GHG sources and GHG sinks, and their quantified GHG emissions and GHG removals[1]
Carbon Neutrality	Condition in which during a specified period there has been no net increase in the global emission of greenhouse gas to the atmosphere because of the greenhouse gas emissions associated with the subject during the same period[2]
Carbon Offsets	Discrete reduction in greenhouse gas emissions not arising from the defined subject, made available in the form of carbon credit and used to counteract emissions from the refined subject[2]
Greenhouse Gas	Gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere and clouds[1]
Greenhouse Gas Source	Process that releases a GHG into greenhouse gas into atmosphere[1]
Greenhouse Gas Emission Factor	Coefficient relating greenhouse gas activity data with the greenhouse gas emission[1]
Direct Greenhouse Gas Emission	Greenhouse gas emissions from greenhouse gas sources owned or controlled by the organization[1]
Indirect Greenhouse Gas Emission	GHG emission is a consequence of an organization's operations and activities, but that arises from GHG sources that are not owned or controlled by the organization[1]
Organizational Boundary	Grouping of activities or facilities in which an organization exercises operational or financial control or has an equity share[1]
Primary Data	Quantified value of a process or an activity obtained from direct measurement, or a calculation based on direct measurements[1]
Secondary Data	Data obtained from sources other than primary data

[1] International Organization for Standardization. (2018). *Greenhouse gases, Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (ISO Standard No. 14064-1:2018)*

[2] The British Standards Institution. (2014) *Specification for the demonstration of carbon neutrality (PAS2060: 2014)*

ABBREVIATIONS AND ACRONYMS

CO_2	Carbon dioxide
CO_2 e	Carbon dioxide equivalent, unit for comparing the radiative forcing of a GHG to that of carbon dioxide[1]
CH_4	Methane
HFCs	Hydrofluorocarbons
PFCs	Perfluorochemicals
SF_6	Sulfur hexafluoride
NF_3	Nitrogen trifluoride
GHG	Greenhouse gas
GWP	Global Warming Potential. Index, based on radiative properties of GHGs, measuring the radiative forcing following a pulse emission of a unit mass of a given GHG in the present-day atmosphere integrated over a chosen time horizon, relative to that of carbon dioxide[1]

1 INTRODUCTION

Background

Sonata Software Ltd. (SSL/Sonata) is a global technology company that enables successful platform-based digital transformation initiatives for enterprises, to create businesses that are connected, open, intelligent, and scalable. Sonata's Platformation™ methodology brings together industry expertise, platform technology excellence, design thinking-led innovation, and strategic engagement models to deliver sustained long-term value to customers.

SSL prepared the GHG Inventory Report for the reported period i.e., Apr 1, 2022 to Mar 31, 2023 and contracted Earthood Services Pvt. Ltd. (ESPL/Earthood) to conduct an independent verification of the same. Earthood is an independent and accredited party to verify greenhouse gas (GHG) emissions inventory prepared by Sonata Software, taking reference from the '*The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard, Revised Edition, March 2004' (the GHG Protocol), by the World Resources Institute and World Business Council for Sustainable Resource Development*. Meanwhile, Earthood conducted the verification in accordance with the International Standard ISO 14064-3: 2019[3].

About Sonata Software Ltd.

Sonata Software Ltd. is a leading Modernization and digital engineering company, headquartered in Bangalore. Sonata provides modernization services using its proprietary Platformation™ approach. It specializes in cloud and data modernization, Microsoft Dynamics Modernization, Digital contact centre setup and management, managed cloud services and digital transformation services.

Founded in 1986, the company has since grown to have a presence in North America, Europe, and Asia-Pacific.

Sonata has partnerships with leading technology providers such as Microsoft, Amazon, Google, among others, and has received several awards and recognition for its services. With a focus on innovation and customer-centricity, Sonata aims to help businesses accelerate their modernization and digital transformation journeys.

Verification Objective

The objective is to provide independent verification of GHG inventory for its operation covering from 1st April 2022 to 31st March 2023 and compliance with the requirements of ISO 14064-3, the GHG Protocol, and associated guidance. This report presents the verification finding on the computation of Sonata software's emissions under Scope 1, 2 and 3 (5 categories) GHG inventory.

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[3] *ISO 14064-3:2019 Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements*

Level of Assurance

The verification was conducted to a reasonable level of assurance in accordance with the requirements of ISO 14064-3. Based on this level of assurance, Earthood verified that Sonata Software's GHG inventory is:

- Materially correct and is a fair representation of the GHG data and information
- Prepared in accordance with the applicable GHG quantification, monitoring, and reporting, standards or practice.

2 ORGANISATIONAL AND OPERATIONAL BOUNDARIES

Reporting Period

The GHG inventory reported emission generated by Sonata Software's activities from 1st April 2022 to 31st March 2023.

Organisational Boundaries

Organisational boundaries refer to the coverage and extent that a company considers for its measurement of emissions. Sonata Software used the operational control approach in its development of the GHG inventory and the subsequent performance measurements. Sonata Software is responsible for all its operations over which it has full control. In this verification, Sonata Software reported the direct (Scope 1) and indirect (Scope 2 and Scope 3) GHG emissions arising from 12 operations activities in India. The GHG emissions for locations outside India were not reported by Sonata Software and therefore were not part of this verification.

Operational Boundaries

Operational boundaries define emissions sources associated with operations controlled by a company. Sonata Software defines its emission sources either as direct or indirect emission based on the following scope:

Table 1. Categorization of Emission Sources

Scope	Based on GHG Protocol (WBCSD/WRI 2010)	Categories of emission sources reported
Scope 1	All direct GHG emissions (except for direct CO_2 emissions from biomass combustion)	Yes • Stationary combustion • Fugitive Emission • Mobile sources • Process emissions (not applicable)
Scope 2	Indirect GHG emissions associated with the consumption of purchased or acquired electricity, steam, heating, or cooling	Yes • Electricity consumption • Diesel consumption for electricity (Shared DG sets)
Scope 3	All other indirect emissions not covered in Scope 2	Yes Emission sources • Purchased goods & services. • Upstream Fuel and Energy emissions • Employee commuting • Waste generated in operations. • Business travel

3 VERIFICATION PROCEDURES

Verification Methodology

In accordance with ISO 14064-3, the verification team identified and determined risks related to GHG emissions. To ensure that the verification process is conducted accurately, a verification plan which includes a sampling plan was used which involves document review, interviews, and on-site visit.

The document review led by the verification team consisted of, but was not limited to, an evaluation of the following:

- GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of report user
- Account for and report on all GHG emission sources and activities within the chosen inventory boundary
- Monitoring methodologies are justified and appropriate
- Frequency, responsibility and authority for monitoring, measurement, and data recording activities are clearly defined
- Documentation is complete and comprehensive
- Activity data are of an appropriate type
- Emission factors used are relevant
- Calculation of the inventory follows the criteria set out in the ISO 14064-1, the GHG Protocol and associated guidance and uses conservative assumptions
- Data quality achieved sufficient accuracy to enable report user to make decisions with reasonable assurance as to the integrity of the reported information

Interviews and Site Visit

The verification team performed a site visit on 25th April 2023. During the site visit, the verification team interviewed the relevant personnel and reviewed Sonata Software's operation based on the evidence of on-site observation and presented documents.

During the on-site assessment, the verification team has interviewed with key personnel to:

- Cross-check information provided
- Review data management and recording procedures
- Procedures to ensure proper document control and management
- Test the correctness of critical formula and calculations

4 ASSESSMENT OF GHG EMISSION SOURCES AND QUANTIFICATION METHODS

Data Collection and Limitations

To ensure the appropriateness of the GHG inventory, Sonata Software's operational activities were verified. Emission sources and activity data were checked to determine whether the process used to compile data was sound and accurately reflect Sonata Software's carbon footprint.

Based on data submitted by Sonata Software and the sampling plan prepared by the verification team, fugitive emissions account for a low or very low acceptable detectable risk. Therefore, the verification and data check focused on this emission source and its activity data in addition to the grid emission source.

The monthly activity data and conversion factors were collected from reliable sources such as Sonata Software's invoices, and vendor mail records. Primary data was obtained directly from these sources, while secondary data came from internal surveys and internal guidelines. The data was checked on a sampling scale, and conversion factors were used to standardize the measurements.

The next section provides details on the calculation method and estimations made for emissions sources relevant to Sonata Software.

Quantifying Scope 1 – Direct Emissions

Scope 1 emissions are direct emissions from sources within the operational boundary that are either owned or controlled by the company. At Sonata Software, there are three major sources of scope 1 emissions, stationary, mobile combustion and fugitive emissions.

Stationary fuel combustion emission sources at Sonata Software include devices that combust solid, liquid, or gaseous fuel to generate electricity at only one specific location (Bull Temple) utilizing DG set. To substantiate the evidence of stationary combustion, records of diesel consumption were submitted for verification purposes.

Mobile combustion refers to company-owned vehicles that generate GHG emissions through combustion of various fuels while moving from one location to another, including vehicles used by company cab. Diesel consumption records from diesel suppliers were given to substantiate the claim.

Fugitive emissions encompass the inadvertent release of greenhouse gas (GHG) emissions resulting from the company's refrigerants, and fire extinguisher systems. These emissions occur through various mechanisms such as leaks, evaporation, or improper handling of these substances. Supplier records were used to validate the claim of fugitive emissions from refrigerants and fire extinguishers, providing evidence of the types, quantities, and associated emissions of these substances.

Assumption/ Limitation:

- Top-up record of diesel and daily meter readings was accurately recorded to the Diesel Consumption Record.
- Tax invoice for mobile combustion was accurately monitored and keyed in by diesel and petrol suppliers.
- They accurately recorded the amount of refrigerant and fire extinguisher consumed.

Quantifying Scope 2 – Energy Indirect Emissions

Scope 2 emission consists of all emissions that occur when the company purchases and consumes electricity, steam, heating, or cooling that are generated at a source not owned or reported by the company.

4.3.1 Electricity Consumption

Electricity consumption was the only Scope 2 emission source relevant to Sonata Software. At Sonata Software, scope 2 emissions consist of grid-delivered electricity and renewable electricity provided by landlord form off-site Hydro power project (Project 0516[5]: Mahatma Gandhi Hydro Electric Tail Race Hydro Power Project of APPL, India). Sonata software reported the Scope 2 on a location-based approach, and emissions from grid-attributed energy were based on December 2022[6] (CO2 Baseline Database for the Indian Power Sector version 18) grid emission factor of India.

4.3.2 Diesel Consumption for Electricity

Sonata Software also recognizes diesel consumption for electricity as a significant source of Scope 2 emissions. At their four locations (Begumpet and Somajigudda in Hyderabad, GV1, GV2 and GV3 in Bangalore, HTC Towers in Chennai), the electricity supplied by the landlord is a combination of grid electricity and diesel-generated power. Diesel generators are used as a backup or alternative source of electricity. The diesel consumption for electricity contributes to Sonata Software's Scope 2 emissions.

To verify the evidence of grid electricity and diesel-based electricity consumption, Sonata Software has submitted records of electricity bills. These records serve as documentation to support the calculation and reporting of Scope 2 emissions associated with these sources.

Assumption/ Limitation:

- Readings of electricity and meters and multiplication factors were accurately recorded in the Monthly Power Consumption Record.

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[5] *Project 0516: CDM: Mahatma Gandhi Hydro Electric Tail Race Hydro Power Project of APPL, India (unfccc.int) https://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1152709432.89/view*

[6] *CO2 Baseline Database for the Indian Power Sector version 18 https://cea.nic.in/wpcontent/uploads/baseline/2023/01/Approved_report_emission__2021_22*.

- Top-up record of diesel and daily meter readings were accurately inputted to the Diesel Consumption Record.

Quantifying Scope 3 – Indirect Emissions

Scope 3 emissions include all other indirect GHG emissions resulting from activities of the company, but they occur from sources not owned or controlled by the company such as upstream or downstream value chain. It is optional to report scope 3 emissions as per *GHG Protocol, A Corporate Accounting and Reporting Standard*.

Despite being optional/voluntary to report Scope 3 emissions, as part of Sonata Software's GHG inventory calculation, several activities/sub-categories that were considered significant by Sonata Software's operations include purchased goods & services, Fuel and energy emissions (upstream), waste generation, employee commute, and business travel.

4.4.1 Purchased goods and services.

Sonata Software follows the GHG Protocol Scope 3 Guidance for calculating and reporting emissions associated with this category. Sonata software utilizes the Spend-based method, which involves estimating emissions for goods and services by collecting data on the economic value of the purchases. They then multiply this value by relevant secondary emission factors, such as average emissions per monetary value of goods. The use of industry average emission factors helps enhance the transparency and consistency of Sonata Software's Scope 3 reports.

Sonata Software utilizes Treeni's ReSustain platform for Sustainability data management, including the calculation of carbon emissions. They use the Emission factor library called EXIOBASE 3.4[7] to determine the appropriate emission factors for their calculations.

To support the verification of Scope 3 emissions associated with Purchased Goods and Services, Sonata Software has submitted records of vendor wise invoices. These records serve as documentation to validate and support the accuracy of their emission calculations and reporting for verification purposes.

4.4.2 Fuel and energy emissions (upstream)

Sonata Software has calculated and reported Scope 3 emissions related to Transmission and Distribution (T&D) losses in their electricity consumption. They used a formula that takes into account electricity consumed, electricity life cycle emission factor, and T&D loss rate. The emissions were calculated based on grid emission factors from December 2022[8] (CO2 Baseline Database for the Indian Power Sector version 18)

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[7] EXIOBASE 3.4 https://www.eea.europa.eu/data-and-maps/data/external/exiobase

[8] Central electricity authority: https://cea.nic.in/wpcontent/uploads/baseline/2023/01/Approved_report_emission__2021_22.

grid emission factor of India) for India. Sonata Software submitted electricity bills as evidence to support the accuracy of their emissions calculations for this category. However, the emissions (upstream) related to fuels used either in Scope 1 or 2 were not considered.

4.4.3 Employee Commute

Work from office

Employee commute is one of the Scope 3 emission sources that are significant to Sonata Software. An employee survey was first conducted among work-from-office employees at Sonata Software to determine the mode of transportation used and the distance traveled from the residential estate to the company.

To calculate the number of emissions for the year, Sonata software adopted the vehicle conversion factors developed by the Land Transport Authority (LTA)[9] and emission factor published by UK Defra[10]. These emission factors were chosen because they are accurately and most recognised by international organizations to report on 2022 greenhouse gas emissions.

Work from home

The employee commute is a significant source of Scope 3 emissions for Sonata Software. To address this issue, Sonata Software has implemented a work-from-home policy to reduce commuting-related emissions. To estimate the energy consumption and greenhouse gas (GHG) emissions associated with remote workers, Sonata Software has adopted the methodology outlined in the "Estimating Energy Consumption & GHG Emissions for Remote Workers: White Paper"[12].

The use of the emission factor database for Indian Power Sector version 18 ensures accurate assessment of CO2 emissions from electricity consumed by work-from-home employees in India.

Assumption/ Limitation:

- The survey included 1,127 participants, and the data was extrapolated to represent a total of 6,434 employees.
- 10 paid leaves are considered for calculating number of weeks per year.
- Ratio of incremental to baseline factor taken for APAC countries as India and major other countries with Sonata operations are APAC.

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[9] Land Transport Authority (2018). Vehicular Emissions Scheme, accessed 23 March 2022, <https://vrl.lta.gov.sg/lta/vrl/action/pubfunc?ID=FuelCostCalculator>

[10] UK Defra 2020 Greenhouse gas reporting: conversion factors 2022 - GOV.UK (www.gov.uk)

[12] White paper: https://www.anthesisgroup.com/wp-content/uploads/2021/02/Anthesis_-Remote-Worker-Emissions-Methodology_Feb-2021.pdf

4.4.4 Waste Disposal

Sonata Software has adopted the emission factor published by the UK government GHG reporting conversion factor[13] to measure and reduce its greenhouse gas emissions. Water disposal, paper waste, and plastic waste were classified as general waste, with paper and plastic waste falling under the category of solid waste.

Assumption/ Limitation:

- The weight of waste was measured and recorded correctly by the service provider, by using a calibrated scale.

4.4.5 Business Travel

This category includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft. Sonata software calculated emissions of air travelling by using the US EPA Emission factors[15] that allows passengers to estimate the emissions attributed to their air travel, considering various factors such as aircraft types and route specific data.

Assumption/ Limitation:

- Sonata software has a detailed and complete employee business travel record.

Data for Computation of Carbon Intensities

Earthood evaluated variables sources to check for carbon intensity over the period of GHG inventory, namely Sonata software's total carbon emissions in tonnage vs gross revenues. The audited P&L revenue for FY2022-23 published by Sonata software and revenue was INR 7449.10 Cr. Data was checked and it was consistent with the reported GHG carbon intensity.

Data Uncertainty

In the computation of emissions, inaccurate or biased results may occur because of a wide range of uncertainties and inconsistencies. To minimise inaccurate or biased results, the verification team evaluated the degree of uncertainty based on the likely sources of uncertainty, including:

- Estimation or model: quantification methods and mathematical equations
- Parameter: quantifying parameters in the method (emission factors, activity data)
- Systematic: estimation bias (e.g., non-representative data, faulty equipment)
- Statistical: random variability of sample data

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[13] the UK government GHG reporting conversion factor: https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors.

[15] EPA: https://www.epa.gov/system/files/documents/202204/ghg_emission_factors_hub.pdf

Uncertainty surrounding the calculation and emission factors were also reduced to a minimum by using the Treeni's ReSustain for Sustainability data management including Carbon emissions calculation. in this platform simply they upload the data on ReSustain platform, and the platform gives Automated emissions calculations for Scope 1, Scope 2 and Scope 3 calculations using automated emission factor library and formulae calculates emissions from each data points.

The test was conducted mainly on a population scale, therefore, uncertainty due to random variability of sample data is well contained. This also applies to uncertainty due to inherent risk and control risk. The inventory of Scope 2 was calculated based on the charges on electricity consumption, while inventory of Scope 1 and 3 was developed based on transaction recorded by Sonata Software finance department and internal data system. Based on the result of the testing, data was accurately computed. Errors identified during the verification process have been duly corrected by Sonata Software. The probability of having material uncertainty is very low, which is potentially caused by manual data input, if any.

5 SUMMARY

Findings on Carbon Inventory

The key findings of this assessment are as follows:

- Sonata software's operation from April 2022 to March 2023 resulted in
  - A total of 2,855.29 tonnes of Scope 1 and 2 GHG emissions
  - A total of 7,070.56 tonnes of Scope 1, 2 and 3 GHG emissions
- Total GHG emissions intensity the period of FY2022-23 are:
  - GHG emissions intensity by gross revenue, tCO_2e/'000 INR *(in Cr.),* = 0.95

Figure 1. GHG emissions by Scope

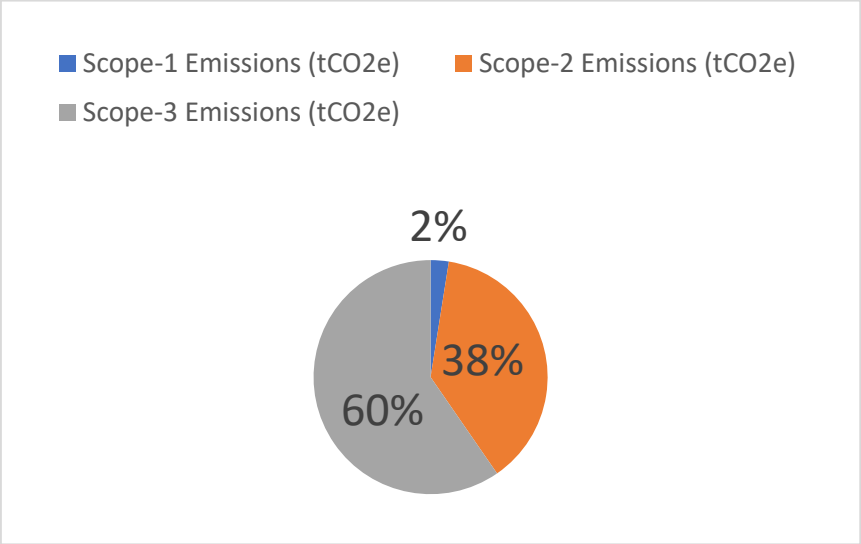


Table 2. Carbon Inventory of Sonata Software

FY 2022-23		Source	Methodology	Emission factor source
Emissions in Tco2e				
Scope-1 Emissions (tCO2e)	**177.11**			
Fuel Consumption	**11.02**	DG set Diesel under Sonata scope as given in Operational boundary	Formula: (Diesel Consumed in GJ X Diesel DG Emission factor in kg/GJ) / 1000	https://ghgprotocol.org/sites/default/files/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx
Fugitive Emission	**161.04**	AC refill under Sonata scope as given operational boundary	https://ghgprotocol.org/sites/default/files/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx	Microsoft Word - Global-Warming-Potential-Values.docx (ghgprotocol.org)
Company Cab travel	**5.03**	Company cabs for employee commute.	∑ (total distance travelled by vehicle type (km) × vehicle specific emission factor (kg CO2e/vehicle-km))	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022
Fugitive emissions – CO2 in fire extinguishers	0.02	CO2 in fire extinguishers under sonata control	tCO2e = (Kg of CO2 refilled)*(% of total CO2 capacity for portable FE)	https://www.epa.gov/sites/default/files/2015-07/documents/fugitiveemissions.pdf
Scope-2 Emissions (tCO2e)	**2678.19**			
Bull Temple Bangalore	**432.12**	Purchased electricity from grid	Meth : Emissions due to Electricity from Grid in tCO2e = Total Energy Consumption in MWh* Emission Factor	Page No. 34 https://cea.nic.in/wp-content/uploads/baseline/2023/01/Approved_report_emission__2021_22.pdf
Hyderabad Begumpet	**660.70**			
Hyderabad Somajigudda	**237.16**			
Okhla Delhi	**14.70**			
Kolkata	**14.86**			
Worli Mumbai	**4.50**			
Andheri Mumbai	**22.53**			
Pune Camp	**3.53**			
HTC Chennai	**151.47**			
GV 1	**1017.91**			
GV 2	**0.33**			
GV 3	**95.20**			
DG set electricity	**23.20**			
Scope-3 Emissions (tCO2e)	**4215.26**			
Scope 3 PG & Services	**1166.16**	Goods/Services purchased in FY 22-23	Spent based method : Scope 3 Emissions calculation(Amount in Euro X Selector(Emission Factor Category /1000	Exiobase 3.4 Vendor categories were grouped based on type of services and emission factor availability in the exiobase. Each grouped vendor category had different emissions factors. Refer CALCULATION SHEET https://www.eea.europa.eu/data-and-maps/data/external/exiobase https://ghgprotocol.org/sites/default/files/st
Transmission and Distribution (T&D) losses	458.62	Emissions due to T&D losses for every unit of grid electricity procured have been calculated under this section.	∑ (electricity consumed (kWh) × electricity life cycle emission factor ((kg CO2e)/kWh) × T&D loss rate (%))	https://cea.nic.in/wp-content/uploads/baseline/2020/07/user_guide_ver15.pdf
Waste Generated in Operations	2.67	Municipal solid waste. Paper, Plastic, E waste and water waste are considered in this category.	**∑ Total Water/paper/plastic disposed (Cubic meter/Kg) × Emission Factor kg CO2e per Cubic meter**	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022
Scope 3 Business travel	**733.44**	Air travel done in FY 22-23	Miles travelled method used for calculations, using GHG Protocol standard. Formula: ((Short Haul (<300 miles) X Short Haul EF) + (Medium Haul (>=300 & <2300 miles) X Medium Haul EF) + (Long Haul (>=2300 miles) X Long Haul EF)) / 907185 Formula explanation The output value after Distance *EF is with the unit g/mile. The emissions are in Tons to 1 ton/mile =	https://www.epa.gov/system/files/documents/2022-04/ghg_emission_factors_hub.pdf Refer to Page 6, Table 10 Air Travel Category (Short Haul, Medium Haul, Long Haul)
Scope 3 Employee travel- Commuting to office	**1701.88**	Employee Commute survey 2023. Survey sample size is 1127 The data is extrapolated to the 6434 employees	∑ (total distance travelled by vehicle type (vehicle-km or passenger-km) × vehicle specific emission factor (kg CO2e/vehicle-km or kg CO2e/passenger-km))	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022
Scope 3 Employee travel- WFH	**152.50**	Employee Commute survey 2023. Survey sample size is 1127. The data is extrapolated to the 6434 employees	Teleworking / WFH is considered using. We have used survey approach given in Estimating Energy Consumption & GHG Emissions for Remote Workers White Paper | February 2021 by Antithesis for calculating WFH emissions https://www.anthesisgroup.com/wp-content/uploads/2021/02/Anthesis_-Remote-Worker-Emissions-Methodology_Feb-2021.pdf	Page No. 34 https://cea.nic.in/wp-content/uploads/baseline/2023/01/Approved_report_emission__2021_22.pdf
Total Scope 1,2 & 3 emissions	**7070.56**			

Findings on GHG Data and Information Quality

Earthood has verified the information and data submitted by Sonata Software and the data is of good quality without many discrepancies. The scope and boundary of the GHG inventory, standards adopted, data collection instrument and method used, source of data, etc were well-defined by Sonata Software in the process of preparing the GHG inventory. The computation was substantiated with clear explanations whenever estimations or assumptions were made.

Earthood assessed the activity data of emission sources, their respective emissions factors, data collection method and quantification approach used by Sonata Software in the verification process. The Sonata Software's GHG inventory that was computed by using the Treeni's ReSustain platform was checked against the primary data collected by Sonata software. The documentary evidence was reviewed to verify the accuracy of the reported GHG emissions data and the underlying assumptions. Earthood also reviewed emissions factors adopted by aforesaid software which were embedded in the Treeni's ReSustain platform, including emission factors of vehicles and grid emission factors. The emission factors used were appropriate for the data reporting period.

5.1.1 Quantifying Scope 1 – Direct Emissions

The consumption of diesel for stationary and mobile combustion, as well as the use of refrigerant for fugitive emissions, was cross-checked against transaction and consumption records. This verification process ensured the accuracy of data entered by the GHG calculator.

5.1.2 Quantifying Scope 2 – Indirect Emissions

The monthly electricity consumption and diesel consumption on a population scale were thoroughly examined and compared. The figures on the electricity bills were in close agreement with Earthood's calculations, which were recorded on Sonata software's internal system and found to be accurate. The grid emission factor was also reviewed and adjusted accordingly to ensure accurate calculations. Additionally, the electricity consumption from renewable energy sources was properly documented and registered under the Clean Development Mechanism (CDM).

5.1.3 Quantifying Scope 3 – Other Indirect Emissions

The data used for calculations underwent a cross-validation process, comparing it against the evidence provided, which included invoices for purchased goods and services. The evidence also encompassed employee commute records, internal records, and transaction records related to waste disposal and business travel. After thorough analysis, it was determined that there were no inconsistencies in the results of the check.

6 CONCLUSION

Sonata Software used the Treeni's ReSustain platform for sustainability data management, which served as a meticulous and structured calculation tool for evaluating its greenhouse gas (GHG) emissions. The calculation methodology adhered to international standards and incorporated region-specific emissions factors. The boundaries set by Sonata Software successfully encompassed the most consequential sources of emissions, which were reinforced with adequate supporting evidence. The methods employed to make assumptions and estimations to fill data gaps were deemed suitable for the purpose.

Sonata Software's carbon inventory calculations have revealed the following

Sonata Software’s total carbon emissions in their GHG inventory are 7070.56 tCO2e. A substantial 40.38% of these emissions stem from Scope 1 and 2 sources, while the remaining 59.62% originates from their Scope 3 endeavors, illustrating Sonata Software's comprehensive approach to carbon management.

Sonata Software's total carbon emissions in their carbon inventory are 7070.56 tCO2. The majority of these emissions come from Scope 3, which contributes 4215.26 tCO2. Scope 2 emissions account for 2678.19 tCO2, while Scope 1 emissions are the smallest, with 177.11 tCO2.

In conclusion, Earthood has verified Sonata software’s GHG emissions and calculation method in accordance with the international standard WRI/WBCSD GHG Protocol Corporate Accounting and Reporting Standard to a reasonable level of assurance.

7 VERIFICATION STATEMENT

Sonata Software Ltd. (“SSL”) has engaged Earthood services Pvt Ltd. (“ESPL”) to conduct an independent verification of its GHG inventory for the period of 1st April 2022 to 31st March 2023.

Sonata Software is responsible for identifying GHG emissions information and the calculation. It is Earthood’s responsibility as an independent GHG verifier to verify on the GHG emission calculation prepared by Sonata software.

GHG Reporting Protocols against which verification was conducted:

- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol

GHG Verification Protocols used to conduct the verification:

- ISO 14064-3: Greenhouse gases, Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions

Methodology

Earthood used verification plan to guide our verification approach, GHG assessment and evaluation steps in accordance with the requirement of ISO 14064-3, and in adherence to the standards’ principles of independence, ethical conduct, due professional care and fair presentation. In the verification process, Earthood obtained the information and clarification necessary to provide a reasonable assurance that the GHG emissions and data are free from material misstatement. The review of the GHG inventory calculation, supporting evidence and interviews with the management of Sonata Software provide a reasonable fair basis for our conclusion.

Data computed from base year emission sources were verified for the period of 1st April 2022 till 31st March 2023:

GHG emissions of Scope 1, 2 and 3:

- Scope 1: 177.11 tonnes of CO_2e
- Scope 2: 2678.19 tonnes of CO_2e
- Scope 3: 4215.26 tonnes of CO_2e

Carbon intensity based on Total GHG emissions:

- GHG emissions intensity by gross revenue, tCO_2e/'000 INR *(in Cr.)* = 0.95

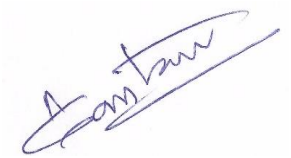
Assurance Opinion

Based on the data and information provided Sonata software and the processes and procedures conducted, Earthood concludes with reasonable assurance that the GHG assertion:

- is materially correct
- is a fair representation of the GHG emissions data and information
- is prepared in accordance with the WRI/WBCSD GHG Protocol Corporate Accounting and Reporting Standard

It is our opinion that Sonata Software has established appropriate process and systems

for the collection, aggregation, and analysis of qualitative data for the determination of these GHG emissions for the boundaries and stated period April 2022 – March 2023.



ASHOK K. GAUTAM
Lead Verifier
Earthood Services Pvt. Ltd
June 13, 2023

DEEPIKA MAHALA
Independent Reviewer
Earthood Services Pvt. Ltd
June 27, 2023

This verification statement, including the opinion expressed herein, is provided to Sonata software and is solely for the benefit of Sonata software in accordance with the terms of our agreement. We consent to the release of this statement by you to third party to satisfy terms of Sonata software application criteria set out by the OCBC Small Medium-sized Enterprise (SME) Sustainable Financing. but without accepting or assuming any responsibility or liability on our part to any other party.

APPENDIX 1: CALCULATIONS OF GHG INTENSITIES

Amount of Absolute GHG emissions based on Scope 1 & 2 (FY 2022-23)		**Baseline emissions (in tonnes) FY 2019-20**	**GHG reductions (in %) As per baseline year**
GHG emissions, tonnes	2,855.29	5,249.37	**45.60%**
Amount of Absolute GHG emissions based on Scope 1 & 2 (FY 2022-2023)			
GHG emissions, tonnes	7,070.56	11,195.09	**36.84%**
GHG emissions intensity based on scope 1 & 2 (FY 2022-23)		Baseline emissions (in tonnes)	GHG reductions As per baseline year
Gross revenue, INR (Cr.)	**7,449.10**	3,743.30	
GHG emissions, tonnes	**2,855.29**	5,249.37	
GHG intensity by gross revenue (tCO2/'000 INR, Cr.)	2.61	**1.40**	**- 46.36%**
GHG emissions intensity based on scope 1, 2 & 3 (FY 2022-23)			
Gross revenue, INR (Cr.)	**7,449.10**	3,743.30	
GHG emissions, tonnes	**7,070.56**	11,195.09	
GHG intensity by gross revenue (tCO2/'000INR, Cr.)	0.95	**2.99**	**68.22%**

APPENDIX 2: VERIFICATION PLAN

ISO 14064-3 Clause		ISO 14064-3 Requirements Evidence Comments	Evidence	Comments
4.3.1	Level of assurance	The level of assurance of the validation or verification shall be agreed upon with the client at the beginning of the validation or verification process.	Conversation	Reasonable level of assurance
4.3.2	Objectives	The verifier and client shall agree on the verification objectives at the beginning of the verification process.	Engagement contract	Assessment of GHG inventory for baseline setting intended for Sustainability linked loan
4.3.3	Criteria	The validator or verifier and client shall agree on the criteria of the validation or verification at the beginning of the validation or verification process.	Engagement contract	Sonata software Ltd. application criteria set out by the OCBC Small Medium-sized Enterprise (SME) Sustainable Financing
4.3.4	Scope	The validator or verifier and client shall agree on the validation or verification scope at the beginning of the validation or verification process. The scope shall include a) organizational boundaries b) physical infrastructure, activities, technologies and processes of the organization c) GHG sources, sinks and/or reservoirs d) types of GHGs e) time period(s)	Submission of Sonata software's GHG calculator and supporting document	a) Operational control b) Sonata software's India operation c) Scope 1, 2 & 3 d) CO_2e e) 1st April 2022 – 31st March 2022
4.3.5	Materiality	The validator or verifier shall establish the materiality required by the intended users, considering validation or verification objectives, level of assurance, criteria and scope.	Verification report	Materiality threshold = 5%
4.4.2	Validation or verification plan	The validator or verifier shall develop a documented validation or verification plan that addresses as a minimum, the following: a) level of assurance b) validation or verification objectives c) validation or verification criteria d) validation or verification scope e) materiality f) validation or verification activities and schedules	Email correspondence Meeting Verification plan (Appendix 2)	The kick-off meeting agenda and this table documents the verification plan
4.4.3	Sampling plan	The validator or verifier shall develop a sampling plan to take account of the following:	Sampling Plan (Appendix 3)	a) Reasonable level of assurance

		a) level of assurance agreed with the client b) validation or verification scope c) validation or verification criteria d) amount and type of evidence (qualitative and quantitative) necessary to achieve the agreed level of assurance e) methodologies for determining representative samples f) risks of potential errors, emissions or misrepresentations		b) Sonata software's operation: Scope 1: Stationary combustion, mobile combustion and fugitive emission, Scope 2: grid-delivered electricity, renewable energy and diesel based DG set for electricity, Scope 3: Purchased goods and services, transmission and distribution losses, employee commute, waste and business travel c) Sonata software application criteria set out by the OCBC Small Medium-sized Enterprise (SME) Sustainable Financing d) Both qualitative and quantitative. (To collect data on population scale since the number of data is small) e) Refer to sampling plan f) Refer to sampling plan for risk level
4.5	Assessment of the GHG information system and its controls	The validator or verifier shall assess the organization or project's GHG information system and its controls for sources of potential errors, omissions and misrepresentations	Verification report Sampling plan	See section 3.1 & 4.5 of this verification report. See sampling plan
4.6	Assessment of GHG data and information	The validator or verifier shall examine the GHG data and information to develop evidence for assessment of the organization's or project's GHG assertion.	GHG calculator Verification report Sampling plan	
4.7	Assessment against validation or verification criteria	The validator or verifier shall confirm whether the organization or GHG project conforms to the validation or verification criteria.	Verification report	
4.8	Evaluation of the GHG assertion	The validator or verifier shall evaluate whether the evidence collected in the assessments of controls, GHG data and information, and applicable GHG programme criteria is sufficient and if it supports the GHG assertion.	Verification report	
4.9	Validation and verification statement	The validator or verifier shall issue a validation or verification statement to the responsible party upon completion of the validation or verification.	Verification statement	

4.10	Validation or verification records	The validator or verifier shall maintain records, as necessary, to demonstrate conformity to the requirements of this part of ISO 14064.	GHG calculator GHG inventory report Email correspondence Supporting document (raw data)	

APPENDIX 3: SAMPLING PLAN

The sampling shall be a risk-based approach, in which different types of risks that could lead to material misstatement shall be focused upon. Earthood shall review GHG inventory results and calculation method on desk-based, supported by on-site and virtual verification session.

Earthood shall conduct sampling based on data disclosed through GHG calculator and emission sources deemed relevant to Sonata software's operation. This shall be determined based upon Sonata software's nature of business and daily activities.

The sampling plan will be based on:

a) Level of assurance agreed with the client: Limited level of assurance.
b) Amount and type of evidence required to achieve the agreed level of assurance: Randomly selected 4 months.
c) The methodology adopted to arrive at representative samples (Samples will be randomly selected and sample size is based on 90% CI and 45% Precision)
d) Risk of potential errors, omissions or misrepresentations (Identified errors will be requested to correct, and potential misstatement will be reported based on extrapolation of the sample data).

Consideration of materiality in planning the verification
Applicable materiality Threshold: Targeted 5%; Actual were lower than the targeted threshold based on the extrapolated data.

The risk assessment is being carried out in internal form 'F68W Risk assessment, Evidence gathering and materiality check.

Led by team lead Ashok Gautam, the team organized a pre-audit discussion to finalize the sampling plan.

APPENDIX 4: REFERENCE/ RECORD USED FOR VERIFICATION

No	Information	Title of document
1	Methodology and General information	a. GHG inventory Sonata Software 22-23 (190423) b. GHG inventory Sonata Software 22-23 29.04.23 c. GHG inventory Sonata Software 22-23 10.05.23 d. GHG inventory Sonata Software 22-23 10.05.23 R 1 e. GHG inventory Sonata Software 22-23 23.05.23
2	Company profile	a. Sonata software ltd., https://www.sonata-software.com/ b. Sonata Software CFP 2022-23 18.5.23
3	Scope 1	a. S1 DG Set (Diesel) b. S1 Fire extinguisher c. S1 Fugitive Emission (AC coolant) d. S1 Mobile Emission (Company Cab)
4	Scope 2	a. S2 DG set (electricity) b. S2 Electricity
5	Scope 3 Purchased Goods & services	a. Sample record for P G&S Vendor Invoice Transactions Report-22-23 b. VENDOR TRANSACTION REPORT DOWNLOAD STEPS
6	Scope 3 Transmission and distribution losses	a. S3 Transmission and Distribution (T&D) losses
5	Scope 3 Employee Commuting	a. Pic 1 Employee commute survey 22-23 (work from office) b. Pic 2 Employee commute surv (work from office) c. Pic 1 Employee commute survey 22-23 (work from Home) d. Pic 2 Employee commute surv (work from Home)
	Scope 3 Waste generated from operations	a. Scrap Material Gate Pass.
	Scope 3 Business travel	a. S3 Business Travel

Annexure 2

Social Impact Assessment by 3rd Party- Blue sky

CSR INSPECTION CERTIFICATE

RATING PLATINUM RATING

Bluesky Sustainable Business LLP

Awards a

Platinum Rating

Platinum Rating: Sustainability Commitment, Leadership Visionary on Social Responsibility, Stakeholder Partnership and Multi – organisational Alliances

For the CSR Project

Sonata CSR Projects FY 2020-2021

Sonata CSR Projects with 1. Agastya International Foundation promoting science education 2. Kriti Social Initiatives promoting education for children and promoting livelihood opportunities for women.

to

Sonata Software Limited.

1/4, 1st Floor, APS Trust Building, Bull Temple Road, N R Colony, Basavanagudi, Bangalore Karnataka 56001

CSR Category:	(ii) promoting education (iii) promoting gender equality, empowering women,
Service contract number:	BSSB-2200-00003
Certificate number:	IB067-2200-01-00003
Date of Audit:	22nd Dec 2022; 20th, ,23rd,24th,27th, 31st Jan23; 1st ,2nd Feb23
Date of Issue:	17-02-2023

Jyotsna Belliappa
Head- CSR Inspections

Shrinivas Bhat
Chief Executive Officer

BlueSky SUSTAINABLE BUSINESS | NABCB IB 067

* Bluesky Sustainable Business LLP complies with NABCB accreditation criterion of "Type A" Inspection Body.

* To be read in connection with Annexure 1

Continue from Page 1

Service contract number: BSSB-2200-00003
Certificate number: I B 0 6 7- 2 20 0- 0 1- 0 0 0 03

ANNEXURE 1

Scope of Work

Impact Assessment of CSR Projects supported by Sonata Software Limited in the social development domains of promoting education and promoting women livelihood enhancement projects.

Assessment Criteria

BlueSky's Accredited Impact Assessment methodology framework, based on ISO 26000: Guidance on Social Responsibility and National Guidelines on Responsible Business (NGRBC, 2018), has been employed to assess the impact of Education Development Program

Inspection Rating Table

Silver Rating
Philanthropic Intent, Leadership supporting of Social Responsibility, Interactive relation with Stakeholders

Gold Rating
Sustainability Intent. Leadership Engaged with Social Responsibility. Mutual Influence on Stakeholders

Platinum Rating
Sustainability Commitment. Leadership Visionary on Social Responsibility. Stakeholder Partnership and Multi - organisationalAlliances

BlueSky SUSTAINABLE BUSINESS

NABCB IB 067

Forward Looking Statements This book contains forward-looking statements that involve risks and uncertainties. When used in this discussion, words like 'will,' 'shall,' 'anticipate,' 'believe', 'estimate', 'intend', 'expect' and other similar expressions as they relate to the Company, or its business are intended to identify such statements. The Company undertakes no obligations to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise. Actual results, performances, or achievements could differ materially from those expressed or implied *in such statements. Readers are cautioned not to place undue reliance on the forward-looking statements as they speak only as on their date of statement*

We welcome you to share with us your feedback and any comments you may have at sustainability@sonata-software.com

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