Sustainable Institutions of India (SII)

THE GREEN INSTITUTIONS RANKING 2022

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Philosophy

The three pillars of Sustainability: 'Environmental (Planet), Social (People) and Economic (Profit)', forms the base of R. World Institutional Rankings (R. WIR) to undertake responsibility for creating awareness and supporting Sustainable Institutions of India.

Ethics a factor of Sustainability

R. World Institutional Ranking (R. WIR) believes that almost all forms of sustainability in planet correlate to human conduct and so, the ethical aspects of reality are critical to ensure sustainability. Ethical sustainability needs to be considered to have sustainable political and social systems and processes.

Approach and Participation

The Ranking Framework for Sustainable Institutional of India (SII) has been curated to encourage as many higher educational institutions as possible to participate, for the data required is very limited. SII – The Green Institutional Ranking is open to any HEI that is duly recognized. However, the board reserves the right to exclude institutions that appear to have falsified data or who are no longer in good operations.

Parameters and Indicators

For SII – The GIR 2022, the parameters and indicators considered are primarily accounted to be of importance by Institutions concerned with sustainability. These include:

1.   Establishment: Infrastructure and Maintenance/Operation

2.   Energy: Conservation, Consumption, and Production (Renewable/Solar)

3.   Resource Utilization: Water (Source, Use and Re-use) and Waste (Treatment and Recycling)

4.   Communications: Transportation (Mode/Scope) and Documentation (Paper/Print/Digital)

5.   Outcomes: Research Outcomes (Publications, Patents), Startups, and Sustainability Report

6.   Perception: Social Impact, Academic Peers and Events (Education and Beyond)

Title of the Survey-Ranking	Sustainable Institutional of India (SII) **:** The Green Institutional Ranking 2022
Announcement	26 January 2022 [Survey Participation Invited]
Last Date	03 March 2022
Processing Fee	5000 INR for all Higher Educational Institutions
Mode of Participation	Submission of Filled-in Survey Questionnaire via email
Ranking Category	Overall Ranking (Consolidated List for PAN India), and State Ranking (Separate for University and College)
Institutions Cash Prizes / Amount Disbursement	Rs. 50,000 to be awarded to the 1st and 2nd Ranked Institutions of the SII – The GIR 2022

Corrections Policy, Refining and Improving of Methodology, and Rankings

Due care has been taken to bring up the documents for better understanding and clarity. However, we acknowledge that the ranking brings some biases along with, and we assure to further rectify it to ensure they best fit the need of HEIs in delivering the SII – The GIR. Where, calculation errors have crept in, we will correct the ranking as per policy. Where the evaluation of evidence has been made, the decision would remain final.

Further information: Any communication/inquiry or otherwise regarding Sustainable Institutional of India (SII) - The Green Institutional Ranking, should be addressed to admin@wiranking.com

1.Primary Data of the Institute

Name of the HEI	B.S. Abdur Rahman Crescent Institute of Science and Technology					
Address	Seethakathi Estate, GST Road, Vandalur, Chennai - 600048					
Website	https://crescent.education/					
Email ID	registrar@crescent.education			director.iqac@crescent.education		
Date of Establishment	16.12.2008					
Affiliation / Accreditation / Ranking	AICTE ✓	NBA ✓	NAAC ✓	BCI ✓	COA ✓	MCI
	PCI ✓	AACSB	ABET	QS ✓	Others: ➢ NIRF India Rankings ➢ THE Impact Rankings ➢ THE World University Rankings ➢ QS I Gauge ➢ Data Quest ➢ Tech 100 Hr. Education of India	
Date of 1st Convocation	09.01.2012		No. of Degree(s) Awarded		287	
Total Number of Degree(s) Awarded (Till January 2022)	UG		PG	Ph.D		PG Diploma
	9420		4173	166		Nil

Name of the Chairperson	Mr. BSA ARIF BUHARY RAHMAN	
Designation	Chancellor	
Email ID	chancellor@crescent.education	
Email ID (Secretary/PA)	chancelloroffice@crescent.education	Dr. Abdul Azeez Khan

Name of the Head of HEI	Dr. A. Peer Mohamed	
Designation	Vice-Chancellor	
Email ID	vc@crescent.education	Mobile - +91 9840940751
Name of the Director	Dr. A. Abudhahir	
Designation	Director (IQAC)	
Email ID	Director.iqac@crescent.education	Mobile - +91 7338885678

2. Student Strength

Total Number of Full-time Students on Rolls	UG		PG		Ph.D.		UG Diploma		PG Diploma	
	7222		1161		516		Nil		Nil	
	M	F	M	F	M	F	M	F	M	F
	5221	2001	711	450	273	243				
Total Number of Academic Programs Offered (2021-2022)	UG			PG			Ph.D.			
	31			23			18			

2.1 Number of students year wise during the last three years

Number of students year wise during the last three years	2021-22	2020-21	2019-20
	8383	7457	6662
Number of outgoing / final year students' during the last 3 years	2021-22	2020-21	2019-20
	2487	2197	1578

3. Teaching Faculty of the HEI

Recruited Full Time	Professor				Associate Professor				Assistant Professor			
	M	F	Others	Total	M	F	Others	Total	M	F	Others	Total
	37	21	0	58	35	15	0	50	165	156	0	321

3.1 Number of full-time teachers' year wise during the last three years

Academic Year	2017-18	2018-19	2019-20	2020-21	2021-2022
No. of Full-time Teachers	366	417	448	457	429

4. HEI's Infrastructure

Campus Area (In Acre)	50.19Acres
Built Up Area (In Sq. Ft.)	15, 24, 024 Sq.ft
Central Library Built Up Area (In Sq. Ft.)	8500 Sq.ft
Total Capacity of Boy's Hostels (Number of Rooms)	1700
Total Capacity of Girl's Hostels (Number of Rooms)	500
Number of Classrooms	169
Number of Auditorium	01
Number of Laboratory (Technical Labs)	127
Number of Recreational Rooms / Lounge for Regular Faculty/Staff	04
Number of Board Rooms (Seating Capacity > 15 People)	01
Number of Computer Systems for Students	3579
Facilities for Rainwater Harvesting (CAPACITY)	All buildings
Facilities for STP (CAPACITY) – Attach Policies for Maintenance	500KLD

5. Energy Conservation

5.1 Energy and system utility description [Less than 500 words]

In modern times, the generation of energy is disproportionate to the demand. Therefore, conservation of energy is a pivotal requirement to meet the demand. The minimal use of energy and finding alternative sources ensures its continuous supply for a long time. With this aspect in mind, energy conservation is done by using the most modern techniques.

Renewable Energy

The demand that is contracted from TANGEDCO is 1200 KVA and the backup power capacity is 2350 KVA(100%).

Solar Power

Three roof top solar power plants are present inside the campus.

Solar Power Plant	Power Capacity	Year of Commission	Cost
I	150 kWp	June 2014	1.32 Cr
II	100 kWp	October 2014	62 lakhs
III	300 kWp	October 2018	1.20 Cr
IV	100 kWp	work in progress	40 lakhs

Total Power Generation is 27,04,654 units till 31st July 2020

Average Monthly Energy Saving is 43%

Solar Water Heaters

Three solar water heaters having a capacity of 36,500 litres which is equivalent to 365 numbers are installed. By this the saving of power is approximately Rs. 24 lacs per annum.

Solar Street Lights

Solar street lights have been installed in the campus.

Bio gas Plant

A bio gas plant of 50m3 capacity was commissioned in the Ladies Hostel to recycle the food waste generated from the Hostel mess. The Institute has a bio gas plant in order to handle the food waste generated from hostel kitchens and canteens. It will generate 15-20m3/day from the plant and the same shall be used for the cooking purposes at hostel kitchen and canteens. The total project amount is 35 lakh and the Institute have contributed Rs.10 lakh.

Energy efficient Appliances in Campus

LED fixtures are being extensively used for all new interior renovation works in the campus. So far, 50.87 kW capacity of LED lights are fixed which provide around 70% of energy saving compared to conventional lighting.

Enclosure: *Annexure - 5.1 – Energy and System Utility*

5.2 Energy Audit carried in past 5 years, if yes attach the detailed report.

Academic Year	2018-19	2019-20	2020-21	2021-2022
Date	Feb 2019	Jan 2020	March 2021	Feb 2022
Agency of Audit	M/s. Petroleum Conservation Research Association Chennai - 600006			

Enclosure: *Annexure - 5.2 – Energy Audit Report*

5.3 Evidence of energy efficiency plan to reduce overall energy consumption and Strategic plans to upgrade existing infrastructure to higher energy efficiency buildings. [Less than 500 words]

It has been a conscious decision of this institute, not to entertain any form of pollution /environment disturbance. Accordingly, measures have been taken to use clean energy, as much as possible and to introduce energy efficient measures / gadgets in all the academic and residential blocks of the campus

Enclosure:
Annexure - 5.3 – Energy Efficiency plan to reduce overall Energy Consumption

6. Resource Utilization

6.1 Measure and tracking mechanism to check optimum usage of water & ensure zero wastage.

B.S Abdur Rahman Crescent Institute of science and technology is one of the pioneers in implementing solutions to save water. The Institute has taken tremendous efforts to reduce the water consumption and also to treat the wastewater generated within the campus so that it can be effectively reused for gardening and toilet flushing.

Our Institution is trying to implement smart water management system in the campus. Towards this, a proposal has been received from WEGoT Utility Solutions- Smart Water Management. This project puts forward an IoT-based solution for collecting water level from the tanks using sensors, transmitting it to a centralized server, visualizing the data through a web interface. The automated system helps the maintenance team to monitor the amount of water consumed in various buildings using the consumption details provided by the system.

Enclosure: *Annexure – 6.1* **– Measure and tracking mechanism to check optimum usage of water**

6.2 Water treatment system in operation and rain-water harvesting system.

BSA Crescent Institute of Science and Technology has Reverse Osmosis (RO) Plant to provide drinking water to the college and hostel. The entire college campus is facilitated with pure Reverse Osmosis (RO) drinking water with water coolers in every block to cater to the need of pure and safe drinking water to all. We have 44,500 liters / day RO systems installed in the campus and water dispensers are available in each floor in every building. Our water treatment plants provide safe drinking water at every tap on the campus. A high level of maintenance attention and regular testing ensure the quality of the water. Water treatment plant with reverse osmosis technology is available to provide quality drinking water.

S.No	Location	Capacity Liters/Hr	Working Hours Per day	Qty. of Treated Water in liters
1	University Main Plant-Near to Main block	1500	6	9000
2	Science Block Terrace	1000	5	5000
3	Ladies Hostel New block Terrace	500	5	2500
4	Men's Hostel Dining Hall	2000	4	8000

5	Men's Hostel Service block	2000	5	10000
6	Aeronautical Block terrace	500	2	1000
7	Life Sciences block terrace	500	2	1000
8	New architecture terrace	2000	4	8000
Total treated Water		**10000**		**44500**

RAINWATER HARVESTING

❖ B.S Abdur Rahman Crescent Institute of science and technology is one of the pioneers in implementing solutions to save water.

❖ The institute has implemented rain water harvesting system in the campus with a strong desire to utilize the rain water at maximum extent.

❖ The Institute has taken tremendous efforts to reduce the water consumption and also to treat the wastewater generated within the campus so that it can be effectively reused for gardening and toilet flushing.

❖ In the forefront to save water, our institute of science and technology has initiated and executed the rainwater harvesting in the campus.

❖ Rainwater harvesting facility is done in all blocks to collect rainwater from the roof of all buildings.

❖ The harvested water is diverted to open wells in institute campus, Men's Hostel and ladies hostel.

❖ In the buildings, sufficient plumbing connections are provided to trap the rain water from the roof tops.

❖ Underground connections are ensured to connect the collected water from the roof top to the rainwater recharge pit.

❖ It was also ensured that the rainwater harvesting structures are constructed as per the norms. The recharge pit provided to collect the rain water is series of filter bed.

❖ The rain water is also stored in Underground sumps of Life Science block, Mechanical Science Block and New Staff Quarters.

Enclosure: *Annexure 6.2 - Water Treatment Plant and Rainwater Harvesting*

6.3 Application of technology to building standards to minimize water use.

AUTOMATIC WATER LEVEL CONTROLLER
The automatic water level devices are capable of controlling the functions of the motor and help to reduce the consumption of electricity; thereby wastage of water and power can be reduced considerably. It also protects the motors from running dry and thus ensures durability. Most of these devices ensure uninterrupted water supply by filling the overhead tank becomes empty and switches off automatically when the underground sump is empty or the overhead tank is full. In this way becomes easy to ensure 24 Hrs water supply without any kind of interruptions.

URINAL SENSORS
Most of the water is wasted when people do not turn off the flush after use out of laziness or negligence. An efficient solution to this problem is the use of urinals with automatic flush controller fitted with sensors that controls the wastage of water and provides a hygienic environment near the urinals thereby reducing the risk of diseases.

6.4 Processes to avoid polluted water reaching the institute's water inlet, including water pollution due to accidents / incidents at the University.

Our past experience has shown that remedial actions to clean up polluted sites and water bodies are more expensive than applying measures to prevent pollution. Although a wastewater treatment system has been installed, water pollution remains a problem. Our approach is to prevent the production of wastes from various sources. In order to implement the water pollution control, the following preventive measures have been applying in our campus.

- ➢ Segregation of Garbage to be controlled at entry point i.e from three major areas Hostels and Canteen.

- ➢ To minimise the waste throwing (plastic, papers & bottles) to the dumbing yard.

- ➢ Height of garb stocked is almost to the height c/wall need to be restricted due to stability of c/wall.

- ➢ To clear the entire garb from the dumping yard immediately.

- ➢ The site proposed for KANKYO should be levelled prior to the soil test.

- ➢ Sewer connection to old biogas plant should be diverted to STP by direct connections - Mixing of sewer and rainwater may be restricted.

- ➢ To form the hard road between STP and collection yard.

- ➢ To close all the holes entering to zoo seepage.

- ➢ To plan the disposal of existing stoked waste (plastic, papers & bottles)

- ➢ Need to utilize the additional raw water storage tank during emergency time.

- ➢ To plan shredder for eggshell & fruit skin (may require as manure) and pet bottles may be stocked as granular in shape for reselling

Crescent
B.S. Abdur Rahman
Institutional Science & Technology

Ramkumar M <ramkumar@crescent.education>

Fwd: STP - observation 29.11.2019

1 message

Jamal <jamal@crescent.education>   Fri, Nov 29, 2019 at 2:52 PM
To: ramkumar@crescent.education

resending

---------- Forwarded message ----------
From: **Jamal** <jamal@crescent.education>
Date: Fri, Nov 29, 2019 at 2:50 PM
Subject: STP - observation 29.11.2019
To: <dhanasekar.ellappan@crescent.education>, Seetharaman Project Engineer <seetharaman@crescent.education>, Balaji Babu <b.balaji1983@gmail.com>, <ramkumarkumar@crescent.education>
Cc: Kaliluthin A.K <kalil@crescent.education>, BSAU Facilities <facilities@crescent.education>

STP Observation Report 29.11.2019

1.Seggregation of Garbage to be controlled at entry point i.e from three major areas M.Hostel , L.Hostel and Canteen.

2.To minimise the waste throwing (plastic,papers & bottles) to the dumbing yard

3.Height of garbe stocked is almost to the height c/wall need to be restricted due to stability of c/wall.

4.To clear the entire garbe from dumping yard immediately.

5. The site for proposed for KANKYO should be levelled prior to soil test.

6.Sewer connection to old bio gas plant should be diverted to STP by direct connections - Mixing of sewer and rainwater may be restricted.

7.To form the hard road between STP and collection yard.

8.To close all the holes entering to zoo seepage.

9.To plan the disposal of existing stoked waste (plastic,papers & bottles)

10.Need to utilize the additional raw water storage tank during emergency time.

11.To rectify STP roof gutter

12. To plan shredder for egg shell,& fruit skin (may resure as manure)
and pet bottles may be stocked as granular in shape for reselling.

Regards
jamal

7. Research Outcome

7.1 Number of research publications by the faculty, staff and/or students, independently at the Institute.

Calendar Year	2017	2018	2019	2020	30 Sept. 2021
Publication	205	233	244	263	239

7.2 Number of research publications, jointly carried with contributions from external institutes/organizations.

Calendar Year	2017	2018	2019	2020	30 Sept. 2021
Publication	136	156	163	176	160

7.3 Number of Faculty/Staff and Amount received any research projects/grants by Government Agencies

Calendar Year	2017	2018	2019	2020	2021
No. of Faculty	15	24	19	23	7
Amount of Grant (in Lakhs)	156.31	412.02	333.64	181.01	75.65

7.4 Number of Faculty/Staff received any Consultancy projects/ Corporate Trainings

Calendar Year	2017	2018	2019	2020	2021
No. of Faculty	64	22	68	29	75
Amount Received (in Lakhs)	66.86	72.17	224.13	328.02	162.54

7.5 Number of Patents Published and Granted

Calendar Year	2017	2018	2019	2020	2021
No. of Patents Published	2	2	15	6	4
No. of Patents Granted	0	0	1	1	0

7.6 Coeducational Outreach activities (public events) undertaken by the institute, not limited to student-led activities (student clubs), customized or need-based demo/lectures.

Academic Year	2017-18	2018-19	2019-20	2020-21	2021-2022
No. of Activities	37	28	27	11	28

7.7 Short–term (Skill development) value-added courses. Or vocational training hosted by the institute which is in online/offline mode, free or with fee.

Academic Year	2017-18	2018-19	2019-20	2020-21	2021-2022
No. of Activities	23	67	64	137	123

7.8 Does the Institute published any Sustainability Report in the past 2 Years? If Yes, attach the report

https://crescent.education/the-impact-rankings-2022/

8. Perception

Mention the Verification Contact Details of 5 Academicians (Director/ VC/ Registrar/ Principal) outside your HEI in similar category/rank/band of Institutions, as yours. (Indian Peer HEIs only).

Name of the Person	Designation	Mobile	Email
Dr. K. Porkumaran	Principal	+91 9677065557	principal@sairam.edu.in
Dr. P. Mannar Jawahar	Vice-Chancellor	+91 9445433388	vc@karunya.edu
Dr. G. Thiruvasagam	Vice-Chancellor	+91 9566112211	vc@ametuniv.ac.in
Dr. S. Ganesh Vaidyanathan	Principal	+91 9445694664	principal@svce.ac.in
Dr. M. Sundar	Vice-Chancellor	+91 9486959185	vc@tnpesu.org

9. PAYMENT DETAILS: Participation, Evaluation & Assessment Fee

Mode of Payment	NEFT/RTGS	ONLINE - DIRECT PAYMENT LINK https://rzp.io/l/sii-ranking
Date of Payment	03.03.2022	
UTR Number / Txn ID	pay_J2V3u4rpZqGXND	
Online Payment Link Rs. 5000 + Tax (Rs. 250)	https://rzp.io/l/sii-ranking	ONLINE - DIRECT PAYMENT LINK

10. Data Validation: Authorized Representatives of the Institution

Head of Placements:	Director, Admissions and/or Branding
Name: Dr. A.K. Kaliluthin	Name: Dr. A. Abudhahir
Designation: Deputy Director (Campus Development & Maintenance)	Designation: Director (IQAC)
Email ID: deputydirector.cdm@crescent.education	Email ID: director.iqac@crescent.education
Mobile: +91 9486075577	Mobile: +91 7338885678

DECLARATION

I Dr. A. AZAD as the REGISTRAR certify that the information provided above is extracted from the records and to the best of my knowledge, is correct and complete. I understand that any false statement / information of consequence may lead to rejection. I also understand that the information submitted can be validated through direct/indirect means and the University/its officials will substantiate the facts with evidence. The payment of Rs 5000 + Taxes towards survey participation in the SII-The GIR 2022 has been made by the Institute.

Date: 11.03.2022.

Place: Chennai

Signature & Seal
REGISTRAR
B.S. Abdur Rahman
Crescent
Institute of Science & Technology
Vandalur, Chennai-600 048