

University Carbon Management Plan (UCMP)

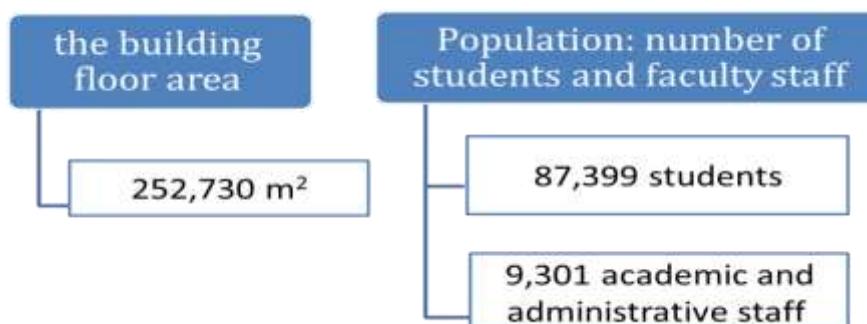
Strategic Roadmap to Net Zero 2050

Institution: Beni-Suef University (Egyptian University)

Executive Summary: Beni-Suef University (BSU) aims to become one of the top universities in the MENA region and the world for sustainability. The University aims to draw up plans with a timetable to combat climate change on campus. BSU is committed to reduce its emissions to about 30-40 % by 2030 and reach nearly net-zero emissions by 2050 in order to promote a society that is healthier, cleaner, and more just. To achieve our net zero emissions target, BSU is committed to participating in developing environmentally friendly infrastructure and the extent to which they take into account the infrastructure standard, the energy and climate change standard, the waste management standard, the water management standard, the transportation standard within the university, the environmental quality standard, and others. BSU is also committed to reducing further and incorporating sustainability into operations and curricula. At all, BSU is concerned with producing knowledge and impact that could have real-life implications not only for the university, but also for the wider community. The intention is to reduce the emissions, by reviewing the way of operation and activities, and setting targets and metrics and continuously follow up on progress, where various actions are taken to achieve a net-zero society.

1. System Boundaries

A. Institutional boundaries for BSU



B. Operational boundaries for BSU

The operational boundaries for BSU's Carbon Footprint report include the following:

Scope 1	Scope 2	Scope 3
<ul style="list-style-type: none">• Stationary combustion (Fuel burning on-site)• Mobile combustion (University fleet)• Campus shuttle buses	<ul style="list-style-type: none">• Purchased energy (Purchased Electricity)	<ul style="list-style-type: none">• University commutes by employee-owned vehicles• Waste generated in operations• water usage

2. Emissions for the current year (Current Footprint)

Based on the 2024-2025 Academic Year audit, the university's total footprint is **11,936.31 tCO₂e**.

Category	Activity	Emissions (tCO ₂ e)	% of Total
Scope 1	Direct greenhouse gases	1383 tCO ₂ e	11.6%
Scope 2	Indirect greenhouse gas emissions (Purchased Electricity)	10,272.7 tCO ₂ e	86 %
Scope 3	Other indirect greenhouse gas emissions	280.61 tCO ₂ e	2.3 %
Total		11,936.31 tCO ₂ e	100%

3. Strategic Reduction Pillars

Pillar 1: Directly owned or operated assets, infrastructure & Energy consumption (Scope 1 & 2)

Actions

- Directing to replace petrol and diesel tanks with cars and buses running on natural gas or biofuel.
- Construction of new buildings and development of old buildings on green foundations (smart building).
- The ordinary filament bulbs are continuously replaced with LED bulbs at different parts of Beni-Suef University.
- Providing energy-saving air conditioners and refrigerators in different buildings.

- The periodic supervision of the University's administrative security for all offices, research laboratories and halls after the end of the official working hours, to ensure that all light sources are closed.
- Maintenance of existing non-functioning solar cells in Faculty of Postgraduate studies for Advanced Sciences.
- Regular Maintenance of all electric devices.
- BSU arranges a budget for energy-saving improvement projects annually and it pays a great attention to rationalize energy consumption
- BSU is planning to install new roof-mounted photovoltaic panels on the various buildings in next years.
- Giving strict instructions for all university employees and students not to use electric boilers and instead, providing special places as buffets that are powered with natural gas or cooking cylinders.

Target

30 – 35 % reduction in building emissions by 2030.

Pillar 2: Indirect fuel consumption and other indirect emissions (Scope 3)

Actions

- Encourage access to cost-effective, environmentally friendly modes of transportation including public transportation, and personal cycling.
- Rationalizing the consumption of the daily amount of water.
- Providing programs for university waste recycling and reducing the use of paper and plastic in the university.
- Launching several initiatives to reduce number of private cars, such as Car Free Day Project by reducing the number of days allowed for parking of private cars aiming to reduce air and noise pollution, traffic congestion.
- Encouraging the decrease of single-use plastics.
- Establishing of external parking areas in front of all campuses.
- Having of measures to minimize food waste at BSU.

Target

About 5- 10 % reduction in building emissions by 2030.

4. Implementation Timeline

Activities/programs	Timeline	Sustainability Budget	Lead/responsible Dept.
Managing energy Efficiency (LEDs & Insulation, etc)	2026-2035	BSU invests an annual average of 48.68% of BSUs total budget in sustainability field including carbon neutrality.	<ul style="list-style-type: none"> - Finance - The University Management. - Engineering Management.
Water and waste management	2027 - 2030		<ul style="list-style-type: none"> - Finance - The University Management. - Engineering Management. - Participation of external collaborative parties. - External grants
Constructing new buildings , maintenance, and Retrofit of old Buildings	2027-2040		<ul style="list-style-type: none"> - Finance - The University Management. - Engineering Management. - External grants
Decreasing Fuel Burning: Diesel used by university-owned vehicles	2027-2035		<ul style="list-style-type: none"> - Finance - The University Management. - Engineering Management. - Participation of external collaborative parties.
Renewable Energy Transition	2028-2040		<ul style="list-style-type: none"> - Finance - The University Management. - Engineering Management. - Participation of external collaborative parties. - External grants
Initiatives and awareness programs	Ongoing		<ul style="list-style-type: none"> - Environmental sector in BSU. - University Performance Development Center. - International Ranking and Sustainable Development Office. - Student Unions and student led society.

5. Monitoring & Governance

The **Manager of University Performance Development Center in addition to members of International Ranking and Sustainable Development Office**, chaired by the Pro-Vice-Chancellor, will meet quarterly and periodically to review Key Performance Indicators KPIs. Progress will be published annually in the "University Sustainability Report."