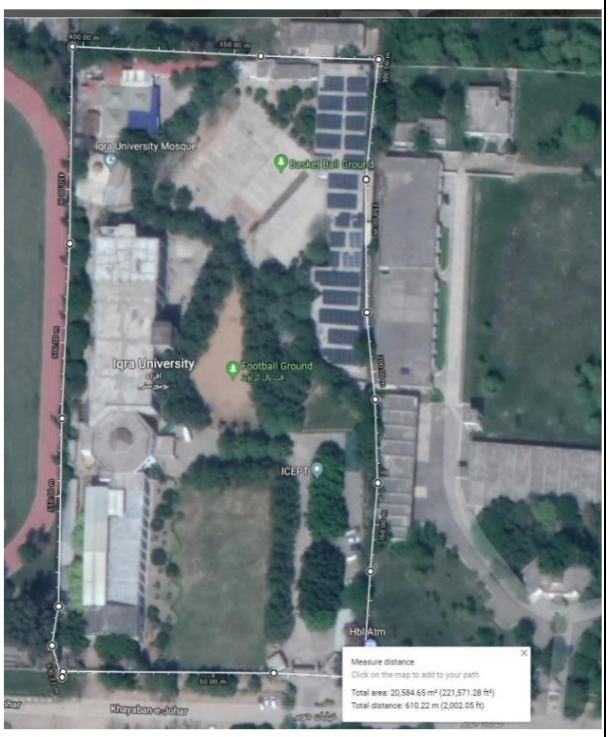
Low-Carbon Energy Use

Iqra University is committed to environmental sustainability by integrating low-carbon energy resources into its campus operations and closely monitoring their usage. The university has installed solar panels across key areas, harnessing solar power to reduce reliance on traditional electricity sources and significantly lowering carbon emissions. Additionally, Iqra University is exploring biogas energy by converting organic waste into fuel, which powers certain facilities while minimizing waste. To ensure the efficiency of these initiatives, the university actively tracks the amount of low-carbon energy generated and used, helping to evaluate the impact and optimize energy distribution. These efforts not only align with the university's sustainability goals but also contribute to a cleaner and greener campus environment. By leveraging and monitoring solar and biogas energy, Iqra University demonstrates its dedication to reducing its carbon footprint and promoting renewable energy usage within the academic community.

a. Renewable Energy Resources

Solar System, Gulshan Campus, Karachi

Solar System, North Campus, Karachi



Solar System, H-9 Campus, Islamabad

Solar System, Chak Shahzad Campus, Islamabad

Additionally, The University has installed a biogas plant at its Chak Shahzad Campus, Islamabad. This biogas plant has a capacity of 20-40 kg, into which cow dung is fed. When 20 kg of dung is used, the unit produces approximately 30 cubic meters of biogas, and when filled to its full capacity of 40 kg, it is not used for producing electricity, however, it produces around 60 cubic meters of gas. The cow dung undergoes anaerobic digestion, where microorganisms break it down, releasing methane gas. This biogas can be harnessed and used for various purposes, such as cooking and teaching. The system's efficiency in converting organic waste into energy makes it an excellent renewable energy source.

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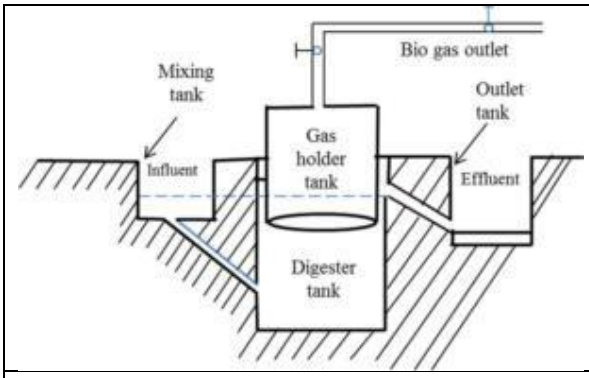
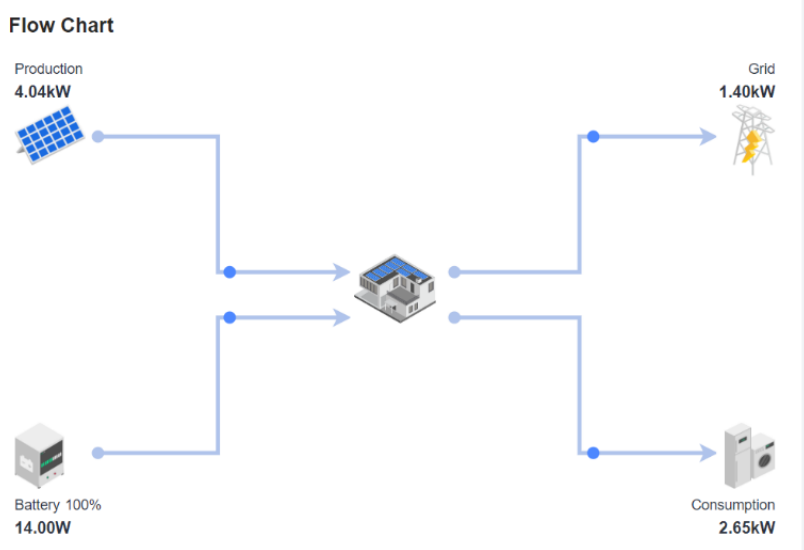
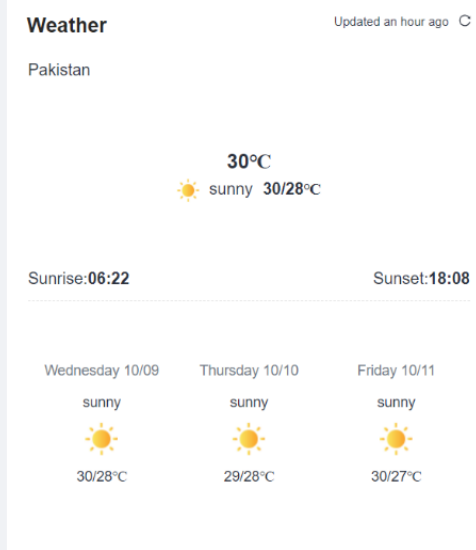
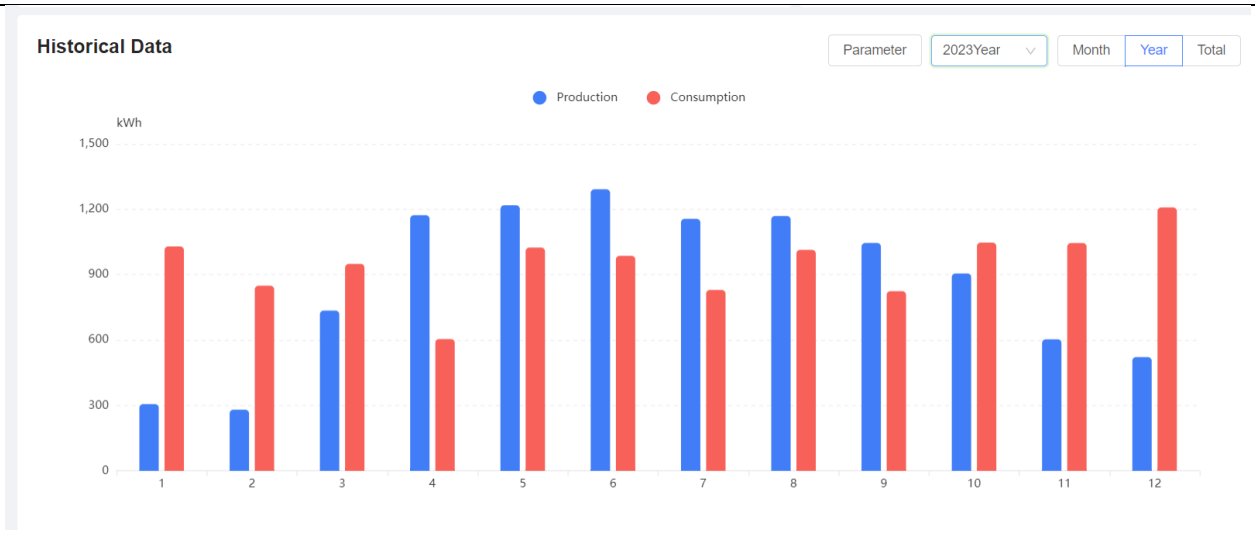
<tr><td> 
</td><td>  </td></tr>
<tr><td>Biogas Unit Process</td><td>Production of Biogas</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Production of Pesticide Spray</td><td>Production of Fertilizer</td></tr>
<tr><td colspan="2">Biogas Plant, Chak Shahzad Campus, Islamabad</td></tr>
</table>

b. Low-Carbon Energy Tracking

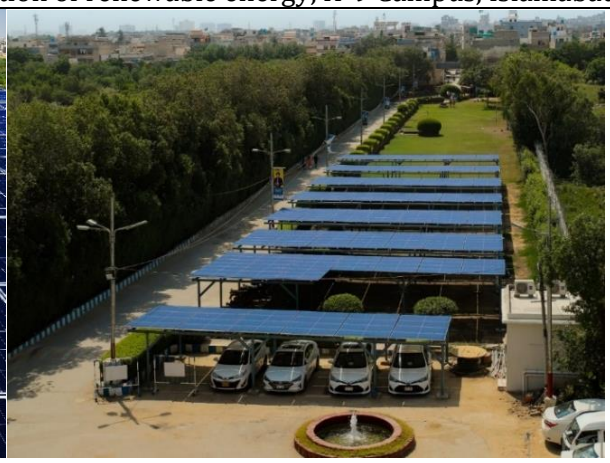
Iqra University has installed solar panel systems across various campuses to harness renewable energy, and these systems are equipped with advanced software that provides live tracking of energy production. This monitoring software enables the university to gather real-time data, generate performance reports, and conduct detailed analytics on energy production and usage. By having immediate access to this data, Iqra University can make informed decisions to maximize efficiency and sustainability. This initiative supports the university's sustainability goals by reducing reliance on non-renewable energy sources and ensuring optimal use of renewable resources, moving closer to its objective of minimizing environmental impact and fostering a green campus environment.

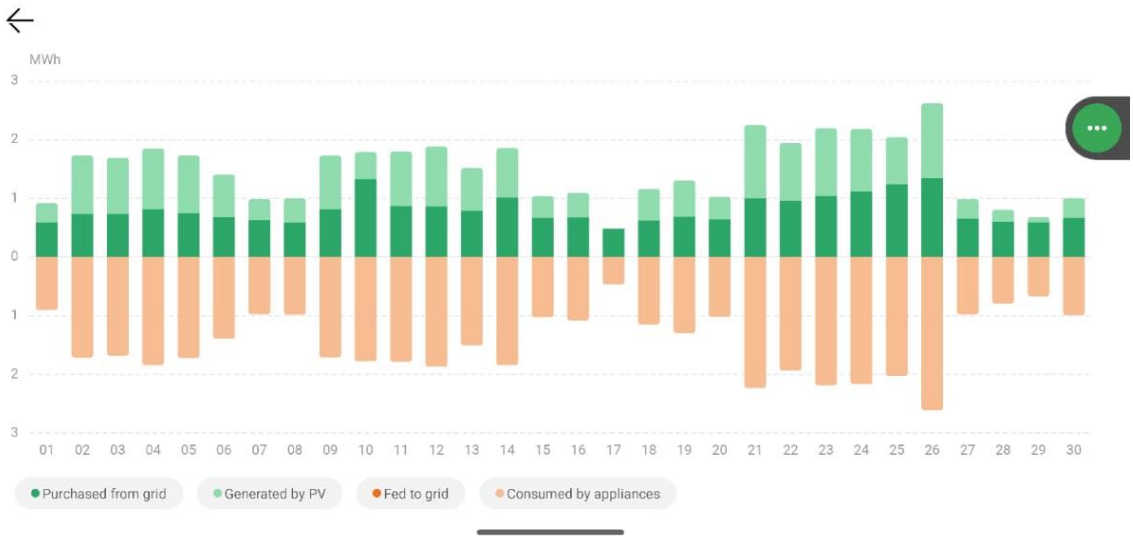


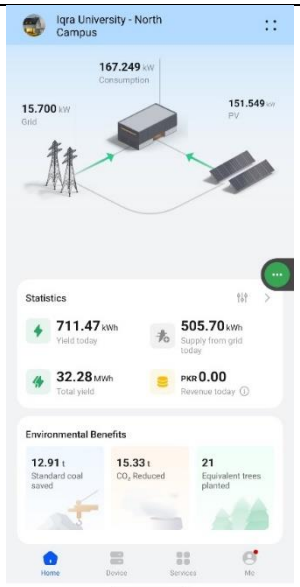




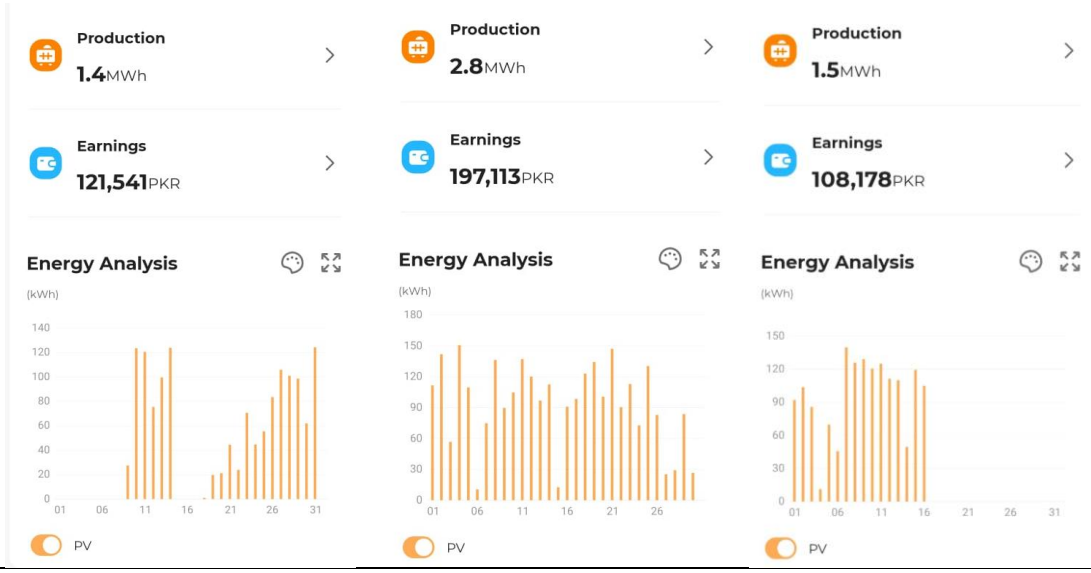
Renewable energy simulation software and installation of renewable energy, H-9 Campus, Islamabad







Renewable energy simulation software and installation of renewable energy, North Campus, Karachi



Renewable energy simulation software and installation of renewable energy Gulshan Campus, Karachi

Solar Energy Produced	Production
H-9	75315
Gulshan	33600
North Campus	246000
Chak Shahzad	73600
Total Renewable Energy	**428515**

Iqra University is dedicated to sustainable practices by integrating energy-efficient appliances and renewable energy solutions across its campuses. In addition to using energy-saving devices such as energy star-rated light fixtures, air conditioners with inverter technology, and efficient office equipment, the university has taken significant steps towards clean energy generation. Solar power panels have been installed across various campuses, contributing to green energy production with an impressive output of approximately 428515 kilowatt-hours annually. This initiative not only reduces the university's carbon footprint but also strengthens its commitment to harnessing renewable energy, minimizing reliance on non-renewable resources. Together, these efforts reflect the university's ongoing dedication to environmental responsibility and sustainability, while promoting energy efficiency at every level.