

+Post



Renovo1.com/Life-Sciences

10 Ways to Increase Energy Efficiency

201

Energizing Change

From temperature-controlled environments to high-performance instrumentation, labs are notorious energy consumers. In fact, they're widely acknowledged as among the most resource-intensive spaces in any industry. Although the resources utilized in a lab play a pivotal role in driving innovation, there are ways to decrease a lab's environmental impact without compromising the quality of scientific work.

As stewards of both knowledge and resources, researchers and lab managers need to consider the environmental impact of their workspaces. Renovo Solutions, in collaboration with My Green Lab, has outlined 10 ways to bolster energy efficiency within lab settings. By championing energy-saving practices, we not only advocate for a greener planet, but also contribute to the long-term success of the scientific industry.

Utilizing our list below:

10 Ways to Increase Energy Efficiency: this list will help align laboratories with a greener, more sustainable future.

01

Establish Collaborative Equipment-Sharing Practices



Collaborate with neighboring labs to minimize redundancy, enhance resource utilization, and foster collaborative research efforts, aligning with efficient asset utilization objectives.

02

Adopt Green Chemistry Principles



Implement environmentally friendly lab operations, which support sustainability practices, operational efficiency, and environmental responsibility.

03

Optimize Lighting with LED Task Lights



Implement energy-efficient LED task lights for effective illumination. Ensure their diligent use and turn them off at day's end to conserve energy.

04

Automate Equipment Power with Outlet Timers



Utilize outlet timers to manage equipment power automatically. This will streamline operations and optimize energy consumption during idle hours.

05

Enhance Safety & Efficiency by Closing Fume Hood Sashes



Preserve energy and create a safer laboratory environment by consistently closing fume hood sashes when not in use. Closing variable air velocity fume hood sashes can save up to 110 kWh/day.

06

Improve Cold Storage Efficiency



Adjust Ultra-Low Temperature Freezers to -70°C for enhanced energy efficiency and sample preservation. Doing so aligns with sustainability practices and asset management principles. Participate in initiatives like the My Green Lab and I2SL's Freezer Challenge to improve sample accessibility and reduce costs.

07

Upgrade HVAC (Heating, Ventilation, & AC Systems)



Support facility management solutions and promote responsible resource consumption by improving HVAC systems for efficient energy usage. Newer models can be programmed to operate during working hours only, saving energy.

80

Run Autoclaves Efficiently



Manage assets effectively and contribute to sustainable operations by running autoclaves efficiently, using energy-saving modes during idle times. Activate energy-conserving mode when not in use. 09

Implement Smart Sensors for Equipment Monitoring



Consider implementing smart sensors on lab equipment for real-time monitoring of temperature, humidity, energy consumption, and equipment usage. This real-time information helps in understanding the operational conditions of lab equipment and identifying opportunities for energy optimization.

10

Choose ENERGY STAR Appliances



Prioritize the use of ENERGY STAR-rated appliances to ensure energy-efficient choices. This promotes sustainability and responsible energy use within the lab.

Ready to Energize Your Lab?

By implementing these energy-saving strategies, not only will you foster a sustainable lab environment but will also ensure long-term success in scientific endeavors. Renovo Solutions is committed to bringing awareness to the environmental impacts of the laboratory by sharing sustainability best practices, and providing on-site support with green lab sustainability projects and initiatives.

Contact Renovo Life Sciences to learn more about our comprehensive suite of services, including Lab Asset Management, Lab Operations and Compliance, and Advanced Technology and IT Services. Together, we will pioneer a sustainable future for scientific innovation!

You can also learn more <u>here</u> about My Green Lab and its suite of lab sustainability programs and certifications.

