



My Green Lab: Life Science Innovation Northwest

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Building a Culture of Sustainability Through Science



Laboratories Are Resource Intensive Spaces



**More energy than
office spaces**



**More water than
office spaces**



**Metric Tons of
plastic waste each
year
(12 billion pounds)**

Mission

My Green Lab's mission is to build a culture of sustainability in science to transform the industry into a global leader on environmental sustainability. Through education, community engagement and market leading certification tools, we are inspiring the scientific community to integrate sustainability into everything they do.

Tagline

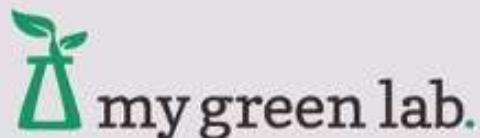
Building a global culture of sustainability in science



The Carbon Impact of Biotech & Pharma

A ROADMAP TO 1.5°C

Friday, November 5, 2021 • 1pm BST/9am EST/6am PST



UN CLIMATE
CHANGE
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UK 2021

IN PARTNERSHIP WITH UNCTAD



World Health
Organization

COP26 Health Pavilion



The GHG Protocol Corporate Accounting and Reporting Standard classifies carbon emissions into three different scopes, divided by direct and indirect emissions:

Direct Emissions:

Scope 1 includes direct emissions from owned or controlled sources

Indirect Emissions:

Scope 2 includes carbon emissions from purchased energy consumed by the reporting company

Scope 3 includes all other indirect emissions upstream or downstream in a company's value chain

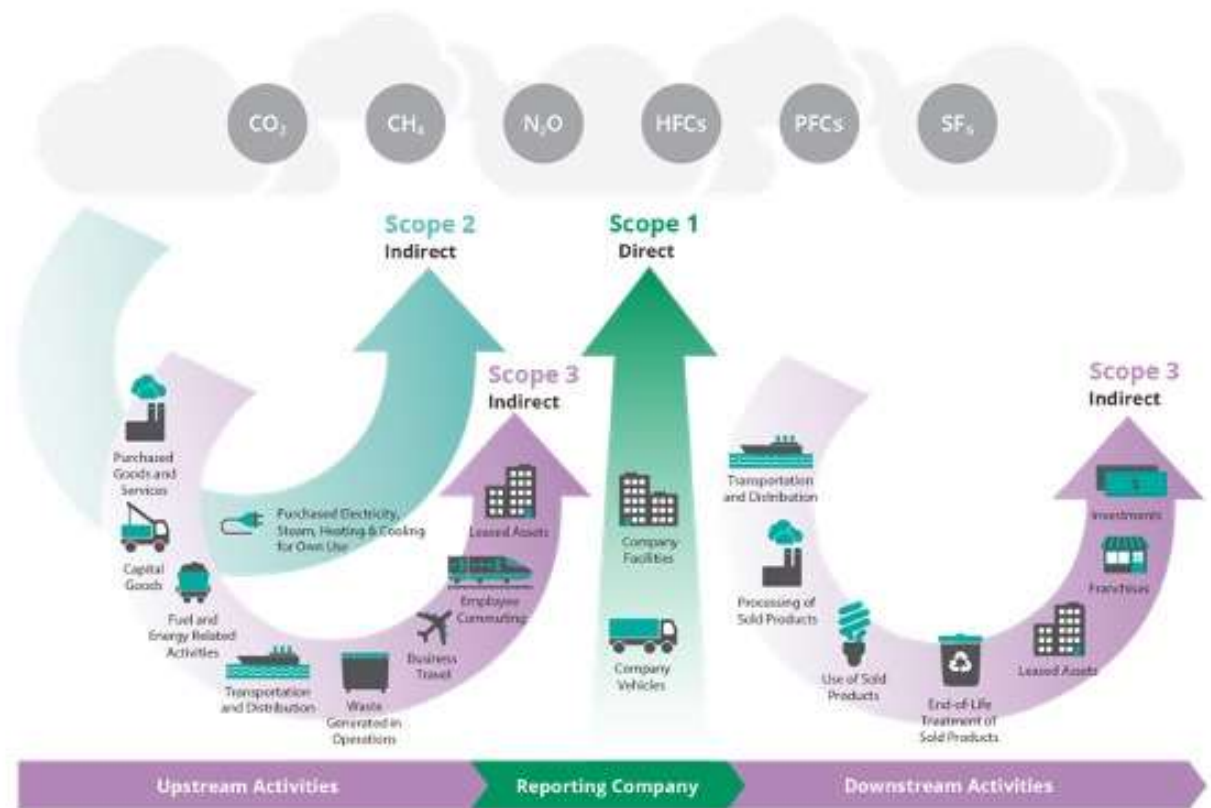
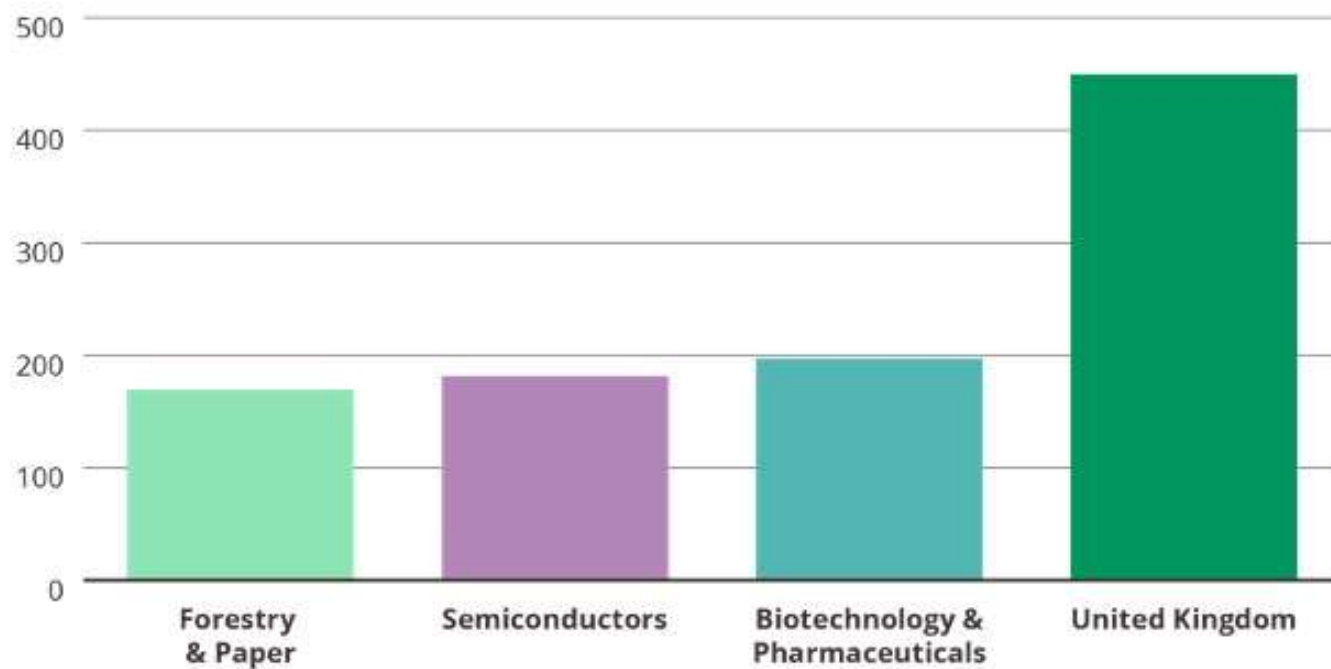


Figure 4: Total Sector Annual Carbon Output Comparison

Total Annual Emissions (tCO₂e) in Millions



Green Lab Certification Selected as United Nation's FCCC's Breakthrough Outcomes



The 2030 Breakthrough Outcome for Pharma states, **"95% of labs across major pharma and med-tech companies are My Green Lab certified at the green-level by 2030."**

Carbon Reduction Targets

Green Labs targets
Scope 1 and 2

ACT targets Scope 3
of lab supplies

Green Labs for CRO
targets Scope 3 of
research

Scope 1 & 2	Scope 3
 my green lab certification. R&D & QC	 Lab Supplies
	 my green lab certification. Contract Research

Get Green Lab Certified

- Online Self-assessment to gauge your lab's sustainability practices
- Comprehensive assessment that covers 14 topics around energy, water, waste, chemicals and community
- Questions look at how equipment is used and maintained, whether certain procedures are used, how materials are purchased, used and discarded, and more
- Focus is on lab behaviors and actions lab members can take to be greener
- Academic Labs, Biotech and Pharma, Clinical Labs, Industrial labs

mygreenlab.org/green-lab-certification.html

The image shows two screenshots of the mygreenlab assessment interface. The left screenshot displays the 'Plug Load' section with a progress bar at 100%. It includes a question about equipment power management and a list of options. The right screenshot shows the 'Vacuum Filtration' section with a diagram of a vacuum filtration setup. The diagram labels the 'air leaving the flask' and 'water from top reservoir'. Below the diagram are several multiple-choice questions related to vacuum filtration practices.



Certification Process

1. Assess Baseline

- Survey lab members to understand current practices
- Make recommendations for improvement



2. Implement Changes

- Labs discuss solutions and implement behavior change practices
- Labs and Green Teams coordinate additional work



3. Get Certification

- Re-assessed lab practices
- Certification level given
- Make recommendations for further improvement based on progress



4. Make More Changes

- Labs adopt additional policies and best practices
- Green Teams support further improvement projects



5. Do Re-Certification

- Re-assessed lab practices
- New certification level
- Make recommendations for further improvements



Get Recognized For Your Hard Work

Green

80% or more of Green Lab assessment actions implemented



Platinum

70% or more of Green Lab assessment actions implemented



Gold

60% or more of Green Lab assessment actions implemented



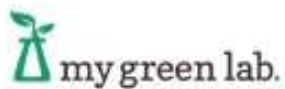
Silver

50% or more of Green Lab assessment actions implemented



Bronze

40% or more of Green Lab assessment actions implemented



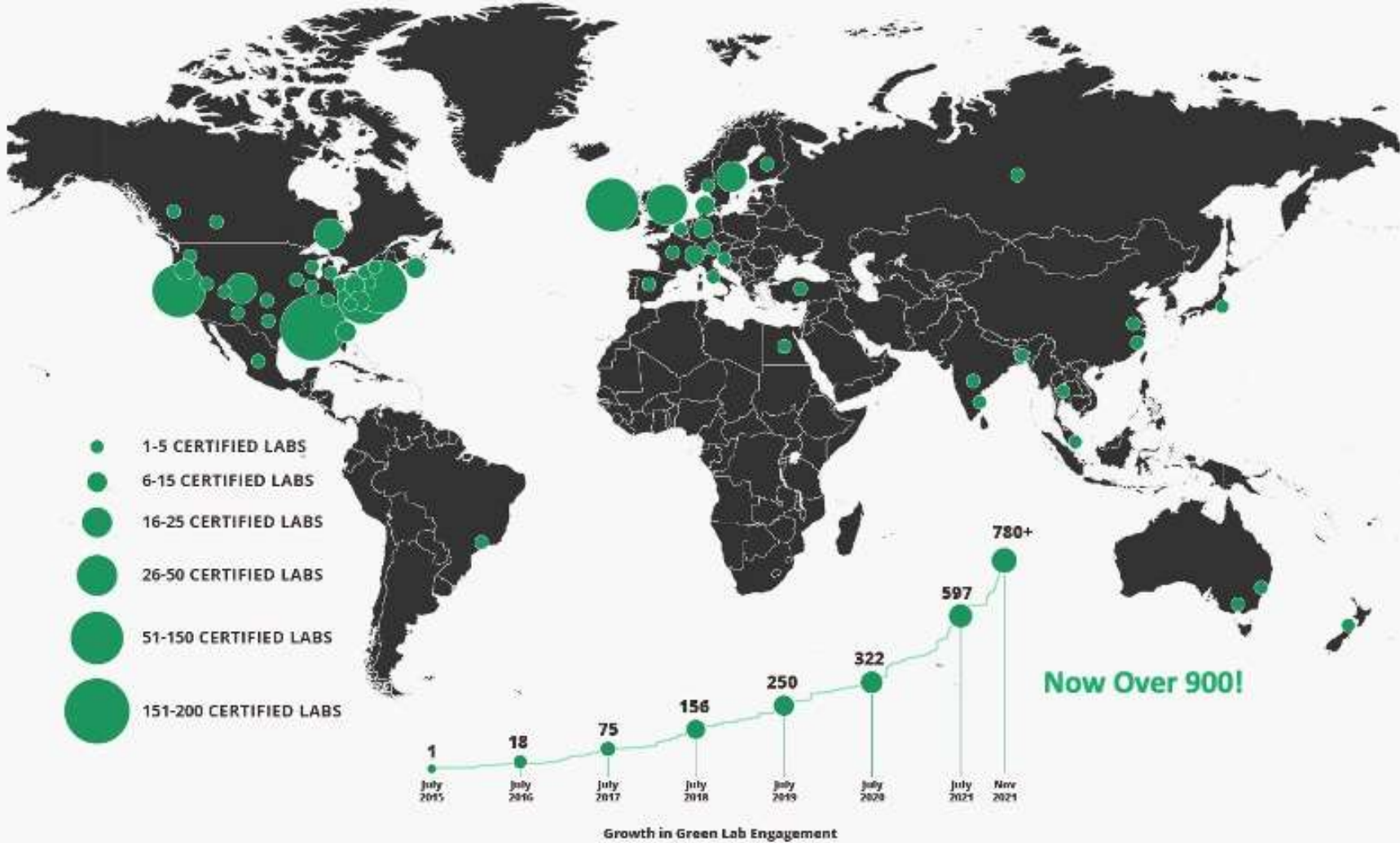
Sample Green Lab Certifications



Amgen
AstraZeneca
Biogen
Capitol Regional District, Canada
Colorado Department of Agriculture
Danone Nutricia
Delta Leaf Labs
Department of Energy
Environmental Innovations
Environmental Protection Agency
Gilead
GlaxoSmithKline (GSK)
Howard Hughes Medical Institute
Johns Hopkins University
Johnson and Johnson
La Trobe University
Medtronic
National University of Ireland
Novartis
Novo Nordisk

Pepsi Co
Queen's University
Royal College of Surgeons Ireland
Sanofi
Stanford University
Takeda
Trinity College Dublin
United Kingdom Research and Innovation
University of Nantes, France
University College Cork
University College Dublin
University of Alabama, Birmingham
University of California, Irvine
University of California, Merced
University North Carolina
University of Melbourne, Australia
University of Southern Denmark
University of Florida
University of New South Wales
Zymergen

A Global Movement





ACT.

Like nutrition labels, the ACT label shows how products 'rate' in sustainability-related categories.





What is ACT?

- An **Eco Label** to enable clear, third party verified communication of **product sustainability** : In response to the **market demand** for more **sustainable solutions**.
- A **Standardized measurement tool** and feedback system that aids manufactures in understanding product sustainability and driving **future improvement**.
- A **fast-growing** program supported by key market players such as Thermo, Agilent, Eppendorf, AstraZeneca, Novo Nordisk, Novartis and many more.

Consumables



Chemicals & Reagents



Equipment

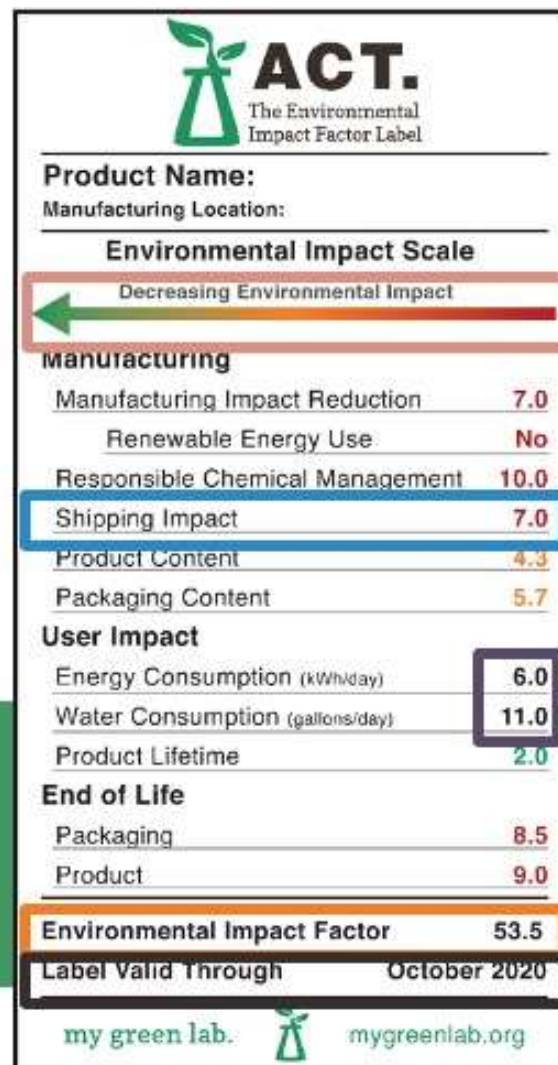


ACT.

Accountability Consistency
Transparency

an eco-nutrition label for
laboratory products

www.act.mygreenlab.org/



Simple color scale indicates environmental impact, with values on a scale of 1 to 10

Additional information about categories available online

Energy and water consumption data help drive sustainable lab practices

Total Impact Factor enables quick comparisons

Expiration date keeps data current and drives continuous improvement

Program Ecosystem

My Green Lab offers a suite of leading-edge programs to engage everyone from students and researchers, to laboratories, major institutions, and corporations in an effort to fundamentally and permanently improve the environmental performance of scientific research.

Certification



Green Lab Certification

International 'gold standard' for laboratory sustainability best practices.

ACT.

The ACT Label

The world's premier eco-label for laboratory products that ensures Accountability, Consistency and Transparency in order to enable sustainable laboratory procurement.

Advocacy & Education



Freezer Challenge

International competition to encourage cold storage best practices.



My Green Lab Ambassadors

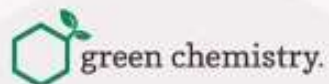
Global community of green lab enthusiasts that have been educated and empowered to bring green lab principles into their work and research.



My Green Lab Accredited Professionals

The first credential of its kind developed to offer scientists an opportunity to grow their knowledge and demonstrate their expertise in lab sustainability.

Research



Green Chemistry

Education on the selection of less hazardous, more benign chemicals.



CEEL

A research think tank to evaluate the energy usage in labs and create standard and incentives for resource efficient equipment.



Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.

-Margaret Meade

Thank you to all our sponsors!

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Thank you!

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