

Caltech
green
labs



ENERGY STAR SLIDES

Visit the Energy Star website for more information: <https://www.energystar.gov/productfinder/>

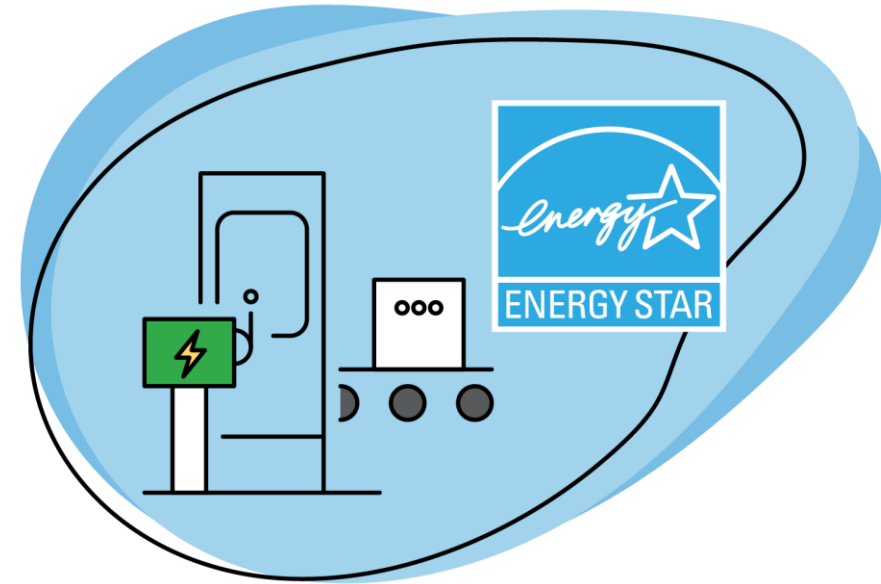
Any questions please email: greenlabsinfo@caltech.edu

For more information visit <https://greenlabs.caltech.edu>

What is Energy Star?

ENERGY STAR products are the same or better than standard products, except they use less energy.

To earn the ENERGY STAR, products must meet strict energy efficiency criteria set by the US Environmental Protection Agency or the US Department of Energy.



Save money and the environment!

Purchasing energy-efficient equipment Can save you a significant amount of money and can be much better for the environment.

For example:

- Replacing your lab refrigerator with a new Energy Star certified refrigerator, you can save about \$230 over the 12-year lifetime of your refrigerator!
- Replacing an ice machine with an Energy Star model not only has 10-16% energy savings, but it can also save you up to 20% in water savings as well!

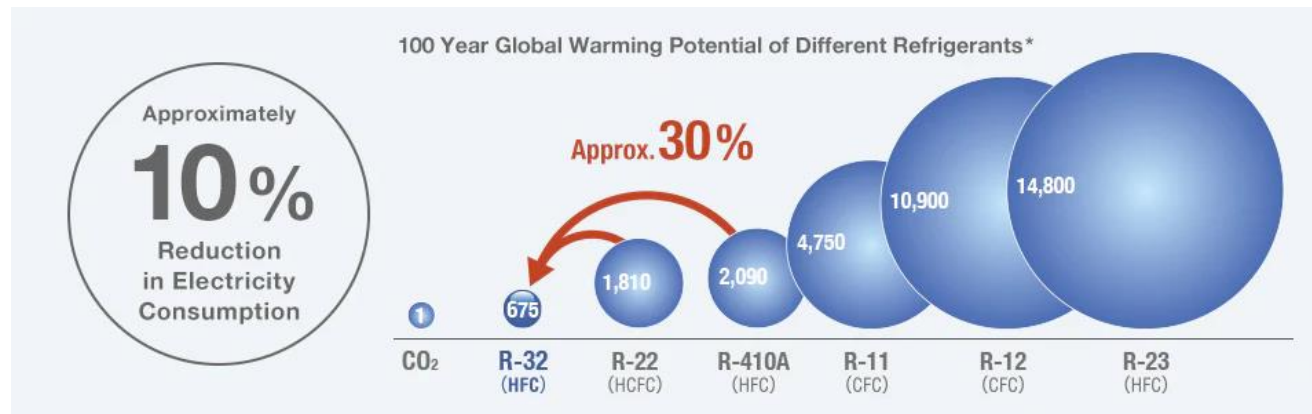


Money Isn't All You're Saving

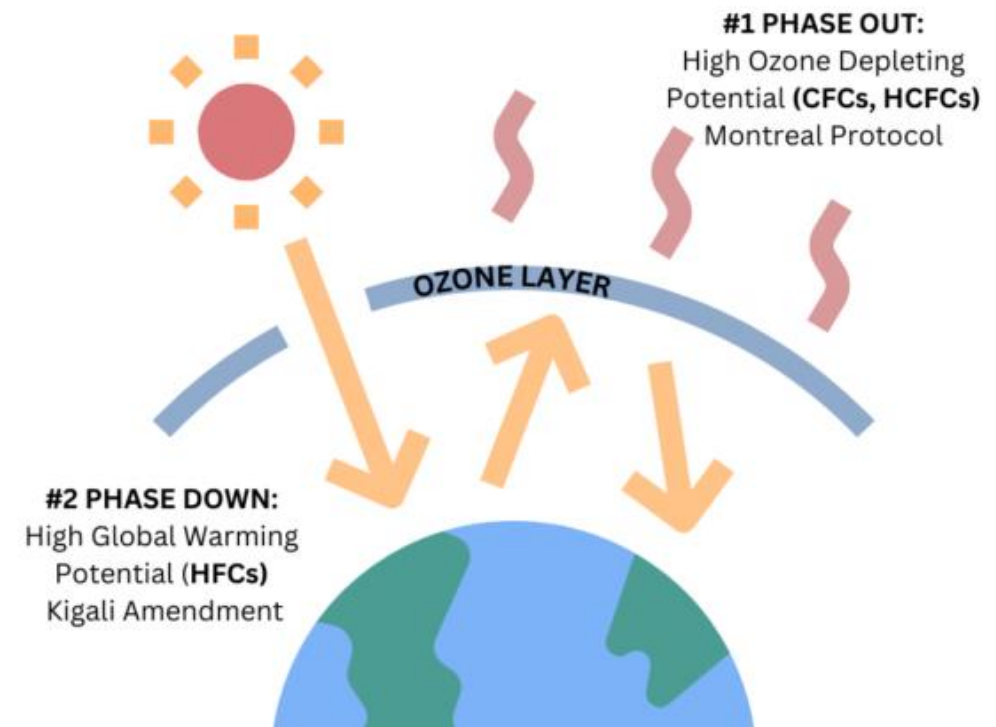
Save money and the environment!

Furthermore, you can choose laboratory grade refrigerators that have lower Global Warming Potential (GWP) refrigerants

- Many refrigerants are powerful greenhouse gases with GWPs hundreds of times higher than CO₂!

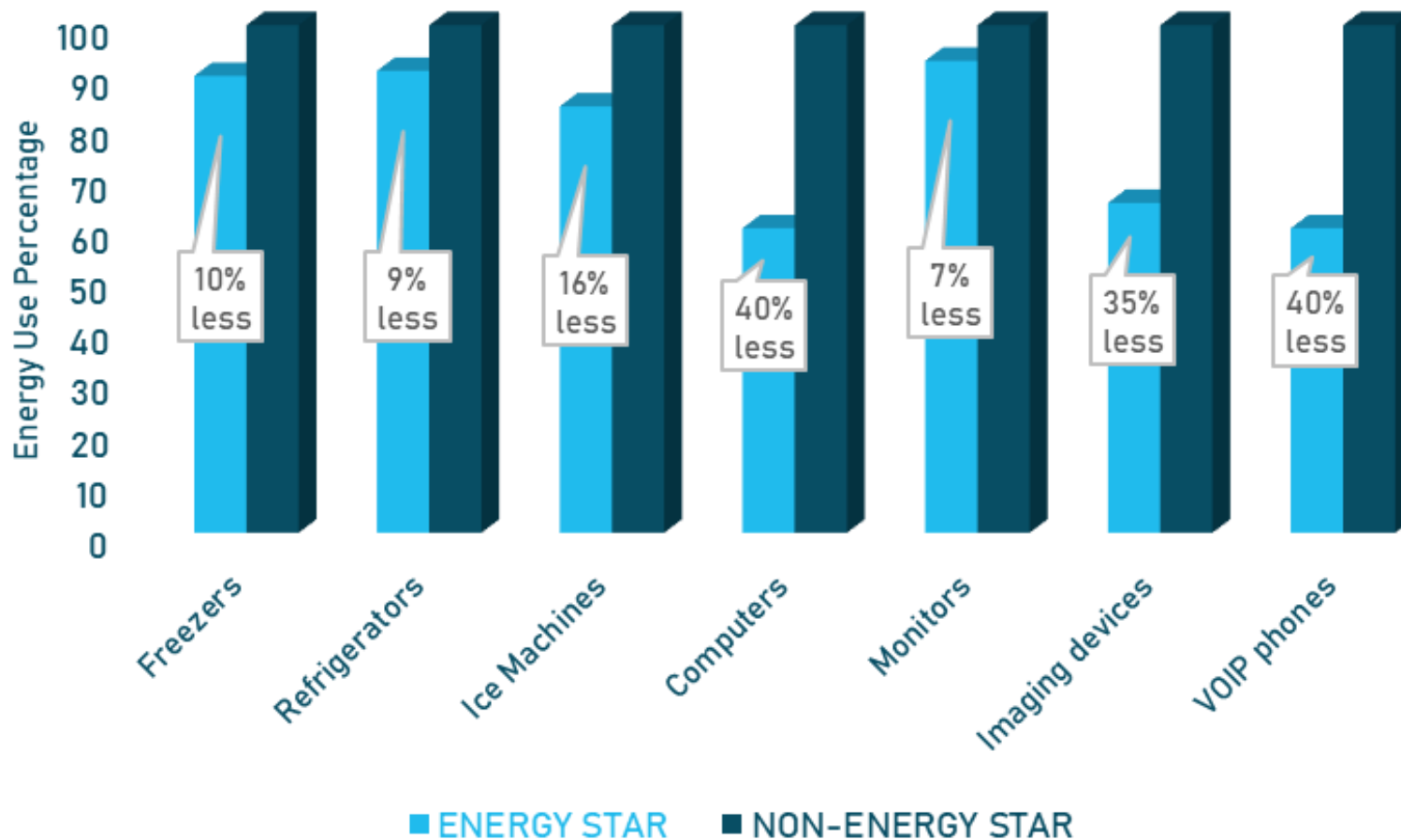


How the Buildup of Older Refrigerants Can Affect the Climate



What difference can it make?

Comparing ENERGY STAR and Non-ENERGY STAR



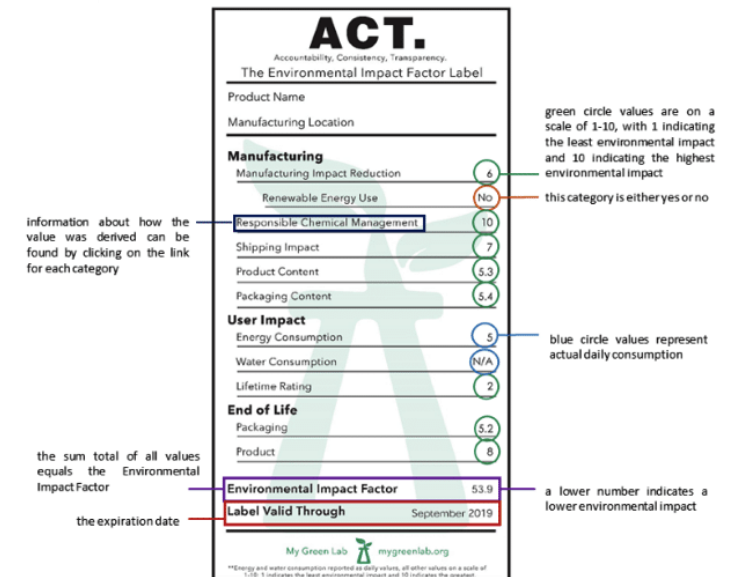
What can you do in the lab (or office)?

When shopping, consider selecting products that have:

- Lower Global Warming Potential
- ENERGY STAR Ratings
- ACT Label Certification

To make your lab more sustainable, trust the ENERGY STAR label and choose products that help you save energy and money, all while protecting our climate.

THE CHOICES YOU MAKE FOR YOUR LAB COUNT TOWARDS OUR CLEAN ENERGY FUTURE!



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Download the [Green Labs Certification Form](#)

For more information visit <https://greenlabs.caltech.edu>

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References and Additional Resources

[Visit our fact sheets website for more information!](https://greenlabs.caltech.edu/resources/fact-sheets) (<https://greenlabs.caltech.edu/resources/fact-sheets>)

- [Appliances that are Energy Star rated](https://www.energystar.gov/productfinder/) (<https://www.energystar.gov/productfinder/>)
- [Freezers, refrigerators, ice machines](https://www.energystar.gov/productfinder/product/certified-lab-grade-refrigeration) (<https://www.energystar.gov/productfinder/product/certified-lab-grade-refrigeration>): are at least **9% more energy efficient than models that meet the federal minimum energy efficiency standard**. ENERGY STAR certified refrigerators **offer high performance features such as high-efficiency compressors that create less heat and use less energy, improved insulation** that helps items stay cold, and temperature and defrost mechanisms that help the refrigerator operate more efficiently.
- When searching for models, check the box for 'Refrigerant type = low impact on global warming'.
- [Lab Grade Refrigerators and Freezers](https://www.energystar.gov/products/lab_grade_refrigerators_freezers) (https://www.energystar.gov/products/lab_grade_refrigerators_freezers)
- **Consider selecting lab grade refrigerators and freezers with a [lower Global Warming Potential refrigerant](#)**
- Freezers that have earned the ENERGY STAR are **at least 10 percent more energy efficient** than the minimum federal standard. An ENERGY STAR certified chest freezer uses about 215 kWh of electricity and costs about \$30 per year to run, while an ENERGY STAR certified upright freezer uses about 395 kWh of electricity and costs about \$60 per year to run. ENERGY STAR **certified freezers utilize advanced technology and offer high performance features such as high-efficiency compressors and evaporators, improved design and insulation, and temperature and defrost mechanisms that deliver substantial energy savings.**