

Objective



ReGrowth aims to mitigate the environmental impact of large format e-waste, beginning with **repurposing undesired refrigerators** into **grow boxes** and **insulated greenhouses** for individuals and local communities with simple conversion kits.

This initiative supports the dual purpose of mitigating the nearly 500,000,000 kg CO2-equivalent annual emissions from refrigerators disposed in the US¹, as well as educating the public about the repurposing link in the Re-X chain.

1. EPA - Energy and Global Warming Impacts of Refrigerants - <https://shorturl.at/ailzO>

Users



Individuals

- Powered **Grow Boxes**
- Passive **Insulated Greenhouses**

Targeting the 66% of US households that already own house plants, empowering them to grow their own high value edible plants and experience the benefits of a circular economy.

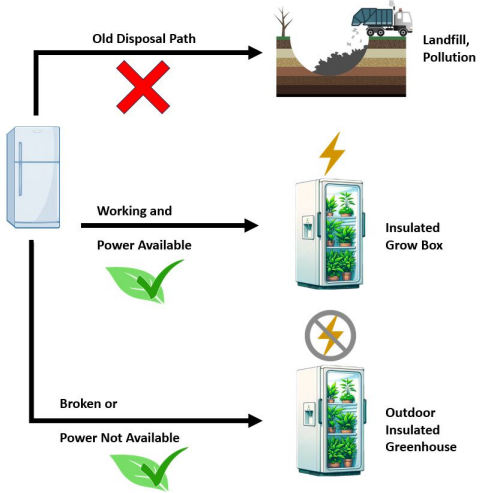
Community Gardens

- Passive **Insulated Greenhouses**

Targeting an initial pilot program with the Wenatchee Master Gardeners chapter and Wenatchee River Institute, highlighting the circular economy to the public

Approach

- Create affordable refrigerator conversion kits
- Conduct a pilot program with individuals and local community gardens
- Incorporate design feedback and expand to more communities



Milestones (2024)

- **Mar** - Initial Greenhouse and Grow Box designs complete
- **June** - First development cycle and prototyping complete for Greenhouse and Grow Box conversion kits
- **Aug** - Environmental testing complete, pilot program commenced
- **Sept** - Initial pilot program feedback received, incorporate into Re-X Phase 2 plan
- **Oct** - Kit updates complete, ready for larger scale pilot