



Background



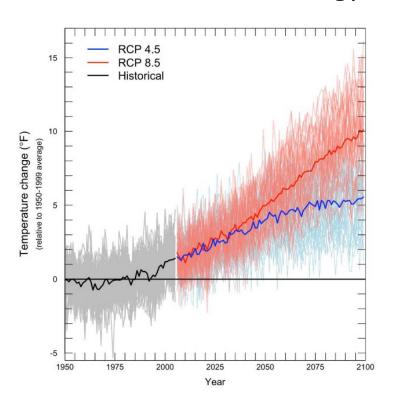
- Energy Research and Development
- Supporting "Community Value First"
- Encourages the planting of trees to provide energy savings,
 and environmental and community benefits.



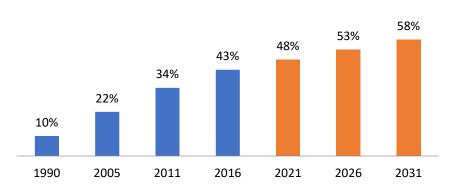
How do trees save energy?



- Delay the penetration of AC units
- Increase the efficiency of AC units that are installed
- Reduce summer energy use



Percent of Tacoma Power Customers with AC



Shade Tree Benefits



- Improve air quality
- Increase wildlife habitat
- Reduce traffic noise
- Mitigate storm water
- Reduce heat island effect
- Reduce energy use in summer months
- Least cost method for getting trees planted
- Helps the City of Tacoma meet EAP goal to increase tree canopy



Cooperation with Partners



- Consulted with experienced community partners
- Merged with City of Tacoma Tree Coupon program to reduce costs and expand marketing and outreach efforts
- Careful not to supplant or disrupt other tree programs
- Added outreach materials to encourage careful planting practices, avoiding utility pipes and wires
- Increased the participation by local nurseries in the program







Results



Trees: Number of trees planted: 2,817

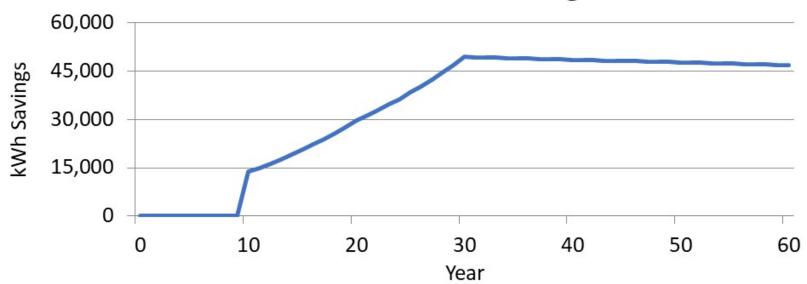
Savings: Total lifetime savings of 1,966 MWh

Cost: Estimated levelized cost of: \$26.55

Est. lifetime CO2 reduction: 5,236 tons

Pilot: Learning how best to deliver this type of program

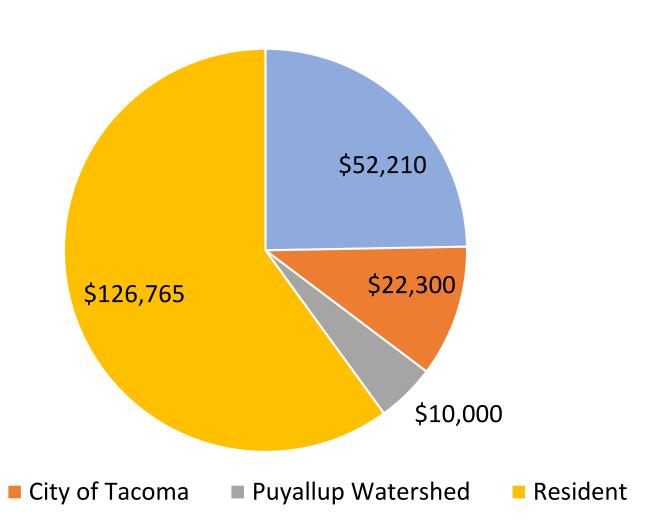
Annual Wholesale Savings



TPU



Shade Tree Pilot Funding



Underserved communities



- In Fall 2019, TPU will launch a Shade Tree Program focused in the Hilltop neighborhood to provide trees at no cost
- Partnering with the Tacoma Tree Foundation who will provide resident outreach and coordinate volunteers to assist with planting







