

OREGON WINE



SYMPOSIUM

Climate Action at Jackson Family Wines

Katie Jackson, 2nd Generation Proprietor & SVP of Corporate
Social Responsibility

Jackson Family Wines Legacy of Climate Action

40 Years of Sustainability and Land Preservation



60% of our land remains in its natural habitat



100% of our estate vineyards and wineries are certified sustainable, including LIVE Certification (Willakenzie Estate was the first LIVE certified winery)



29 Million Gallons of Water Saved Annually at Wineries



You Can't Manage What You Don't Measure



Conducted first carbon footprint inventory in **2009** and exhaustive review in **2015**

Since 2015, reduced our Carbon Footprint by **17.8%**



Creation of International Wineries for Climate Action

- Co-founded in 2019 by Familia Torres (Spain) and Jackson Family Wines (USA)
- **Mission:** To raise awareness in the viticulture industry of the need to reduce greenhouse gas emissions in order to mitigate the effects of climate change, to promote the adoption of emissions footprint inventories, and to advance solutions that help members achieve their emissions reduction targets.
- **Purpose:** Provide a scalable roadmap and strategies to decarbonize the wine sector as soon as possible.
- **Goal:** For all members to *achieve Net Zero emissions in total (Scopes 1-3) by 2050 at the latest*, ensuring constant reductions to meet intermediate targets by 2030.



**INTERNATIONAL
WINERIES FOR
CLIMATE ACTION**





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Membership Growth:

- 2019 - **2** Founding Members
- 2020 - **10** Members
- 2021 - **22** Members

These Members Span 7 Different Countries and 5 Continents

Stay tuned as IWCA announces NEW members soon!

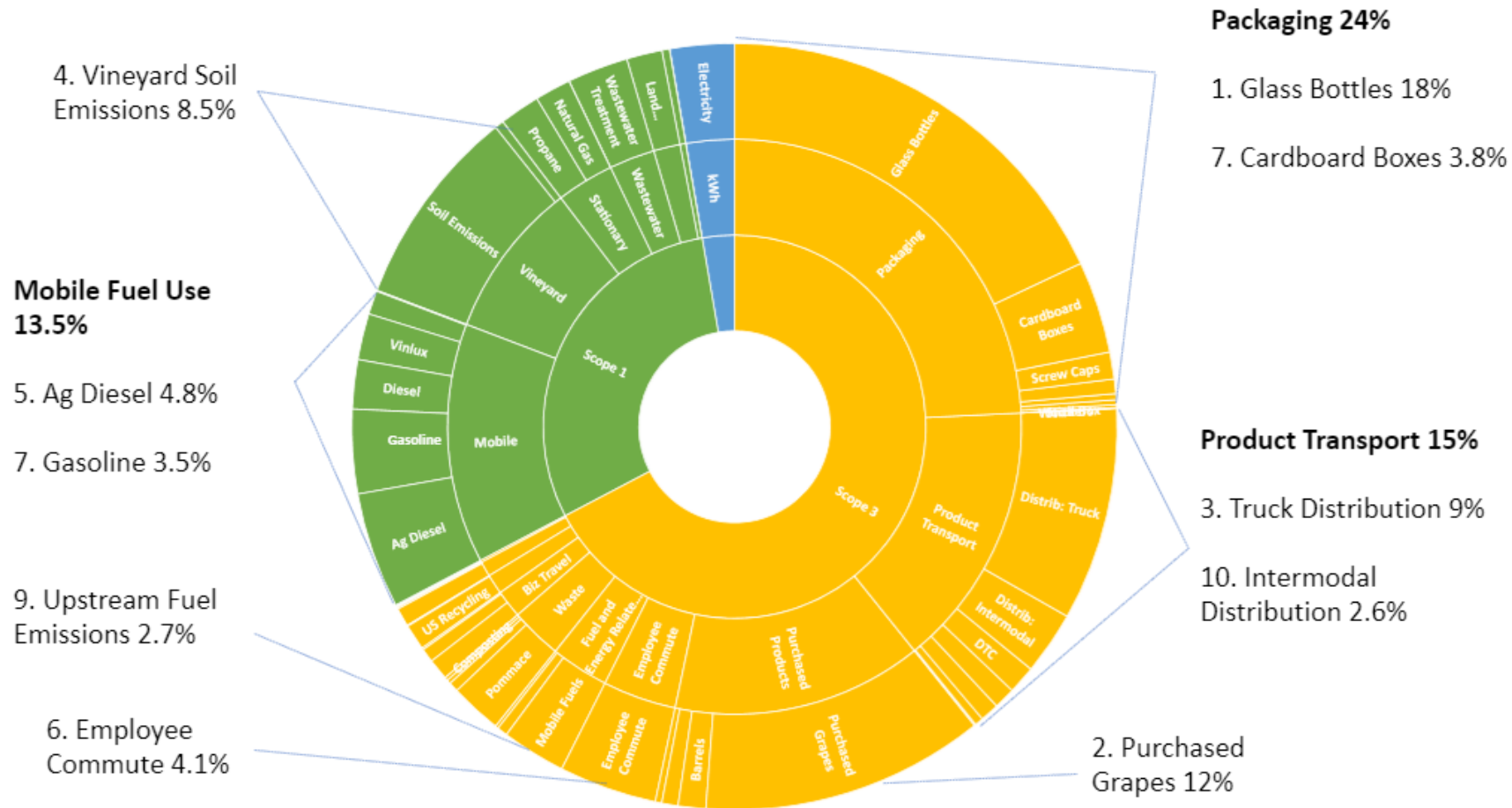
Other Highlights:

- Released **Greenhouse Gas Emissions Calculator** to help wineries measure carbon footprint
- Joined **United Nation's Race to Zero Campaign** as first representative of wine and agricultural industry
- Hired **Meridian Institute** as Secretariat to support organizations daily operations and strategic planning
- Released First Annual Report in 2021



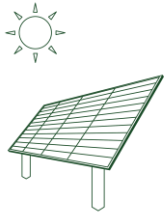
Jackson Family Wines 2020 Carbon Footprint

2020 Emissions Breakdown



GOAL: Reduce Our Carbon Footprint in Half by 2030 and Become Climate Positive by 2050

Key Initiatives To Win Our Race to Zero



Continue Investment in Renewable Energy: We have U.S. Wine Industry's largest solar array with 23,000 panels. In Oregon, we generate 240MWh of solar energy annually (WillaKenzie and Gran Moraine). This includes more solar, installing utility scale wind turbine, and moving our vehicle and tractor fleet towards zero emissions vehicle.



Bottle Light-Weight Efforts: We reduced the bottle weight by 5% on our four highest volume bottle molds, reducing company emissions by 2-3% annually. This initiative has also saved us approx. \$1 Million annually in glass costs, as well as approx. \$500,000 a year in fuel costs. We are going to continue this initiative throughout our portfolio.



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Sustainability at Silver Oak & Twomey Cellars

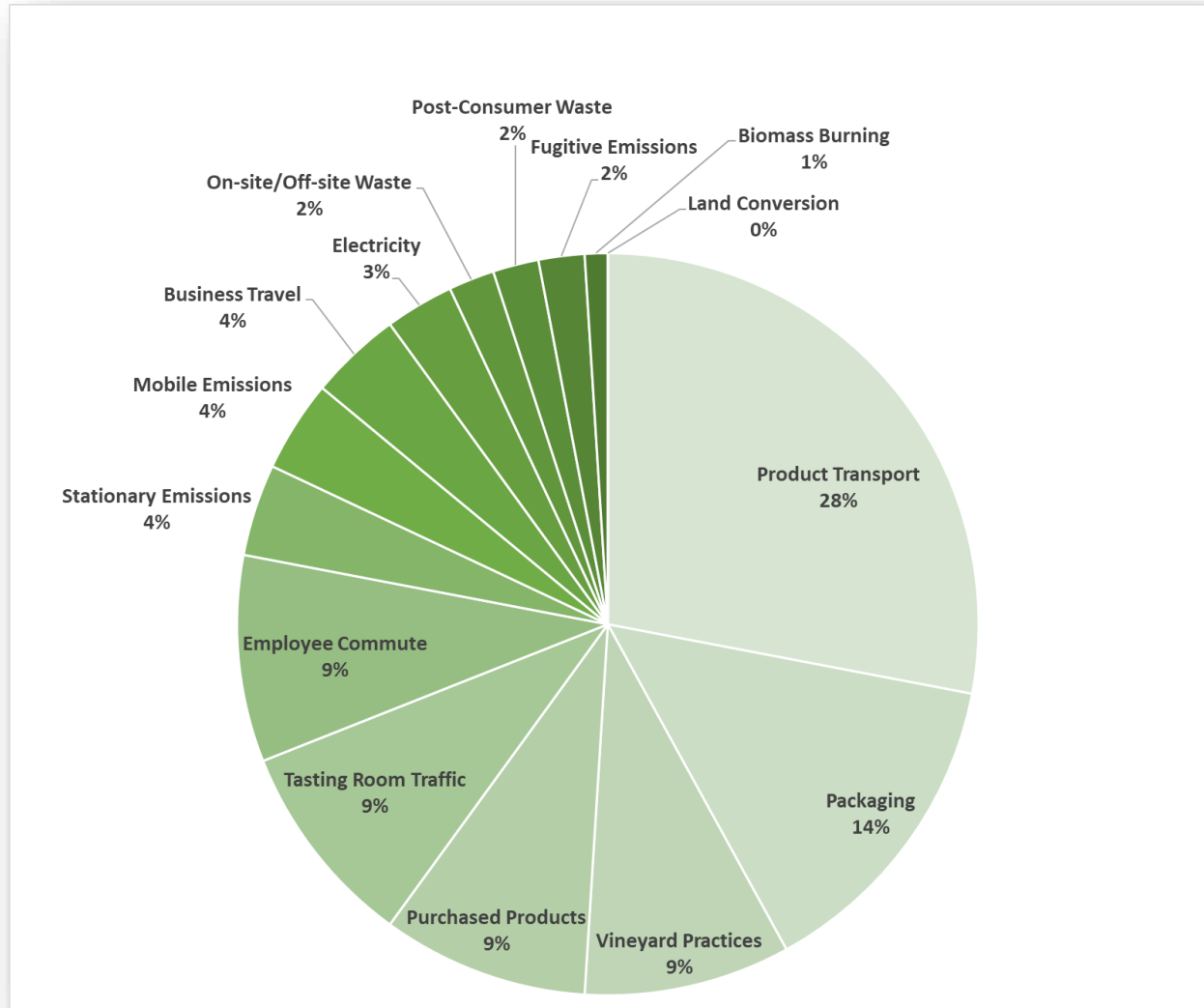
Haley Duncan, Safety & Sustainability Manager

Silver Oak & International Wineries for Climate Action

- Joined IWCA in 2019
- Completed GHG audit for years 2019, 2020
- 54% on-site renewable energy across all properties



2019 Baseline Emissions



The Alexander Valley Winery

- Carbon-free hot water system
- Ammonia-based refrigeration
- All electric HVAC & appliances



LIVING
BUILDING
CHALLENGE



The Alexander Valley Winery

- Membrane Bioreactor treats all winery process water
- Reuse in cellar, irrigation, cooling tower, and toilet flushing
- 1:1 ratio use water to wine



Next Steps

- Packaging
- Pallets
- Green Power
- Electric vehicles
- Ongoing equipment maintenance
- Reduce on-site waste

