ReFED's 2020 Methodology for Measuring Food Loss & Waste

APEC 2019 Expert Consultation on Reducing Food Loss & Waste (FLW)

ReFED | Rethink Food Waste
Through Economics and Data

APEC economies will be able to use ReFED's 2020 methodology to track FLW over time.

2016 ReFED Roadmap report evaluated FLW solutions and produced actionable insights

- First report to quantify food waste in the U.S. across all sectors
- Roadmap report calculated economic benefit of FLW solutions
- ReFED methodology calculates FLW impact by solution

ReFED is updating Roadmap methodology to create a 'Roadmap 2.0'

- Stakeholder use of 2016 Roadmap provided useful lessons of what worked well
- More granular data is needed to drive decision making
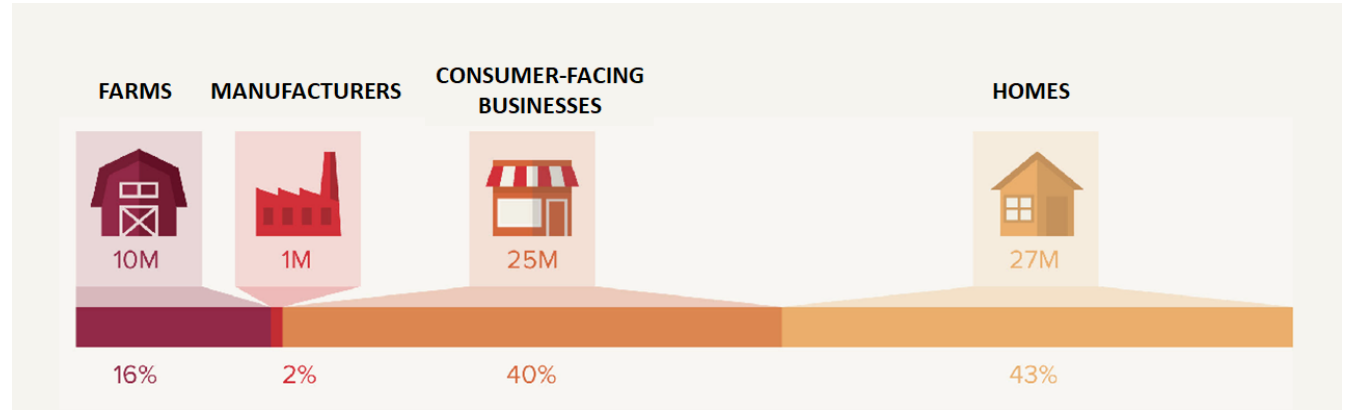- The ability to track progress over time is required to measure against goals

ReFED's 2020 methodology will include significant improvements

- Roadmap 2.0 will be first to **quantify FLW by cause** across all sectors
- Roadmap 2.0 will break down **solution benefits by actor**
- **Digital-first platform** will enable data infrastructure to be used by APEC economies

ReFED

ReFED Roadmap quantified food waste in the U.S. across all sectors
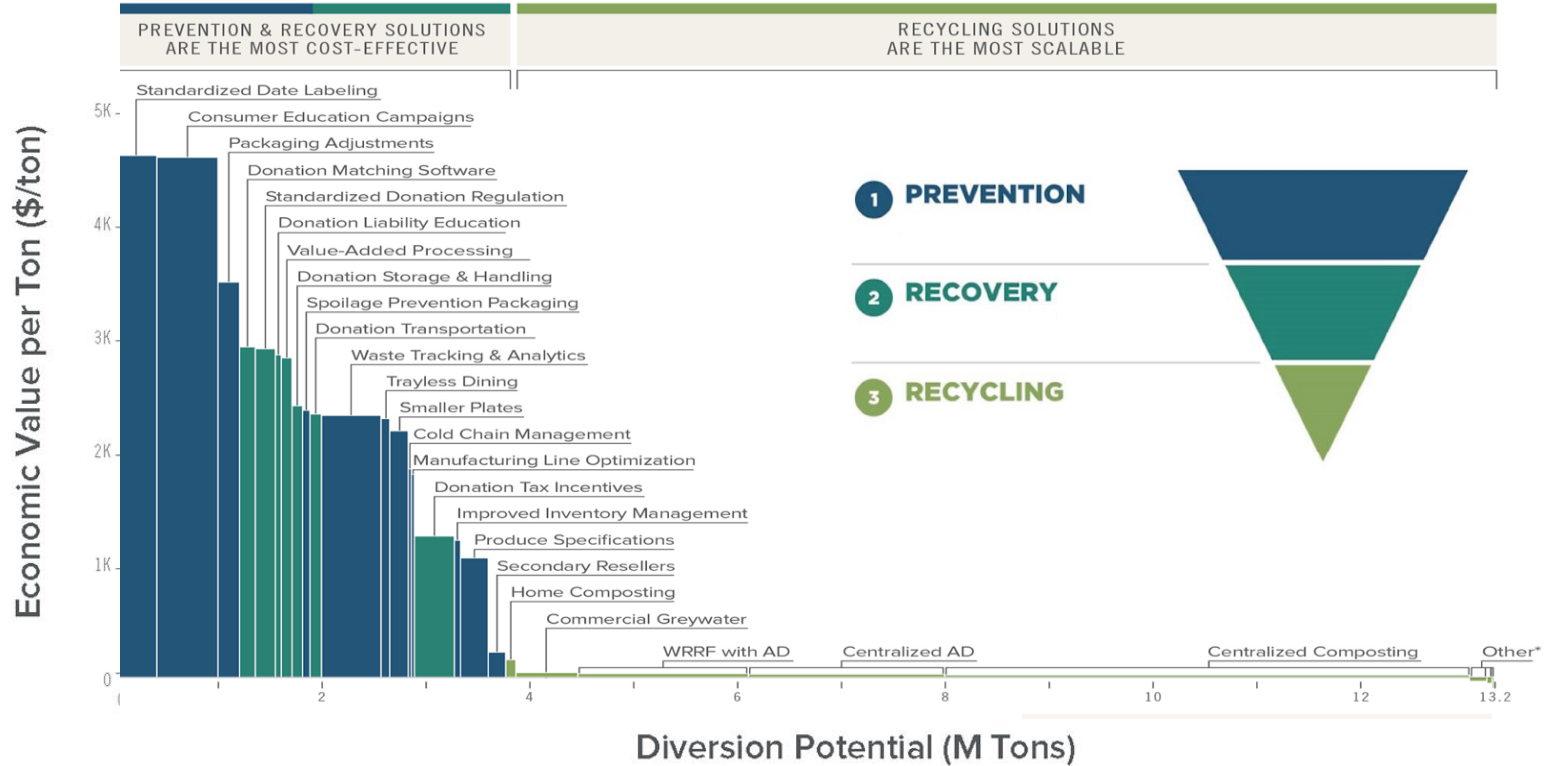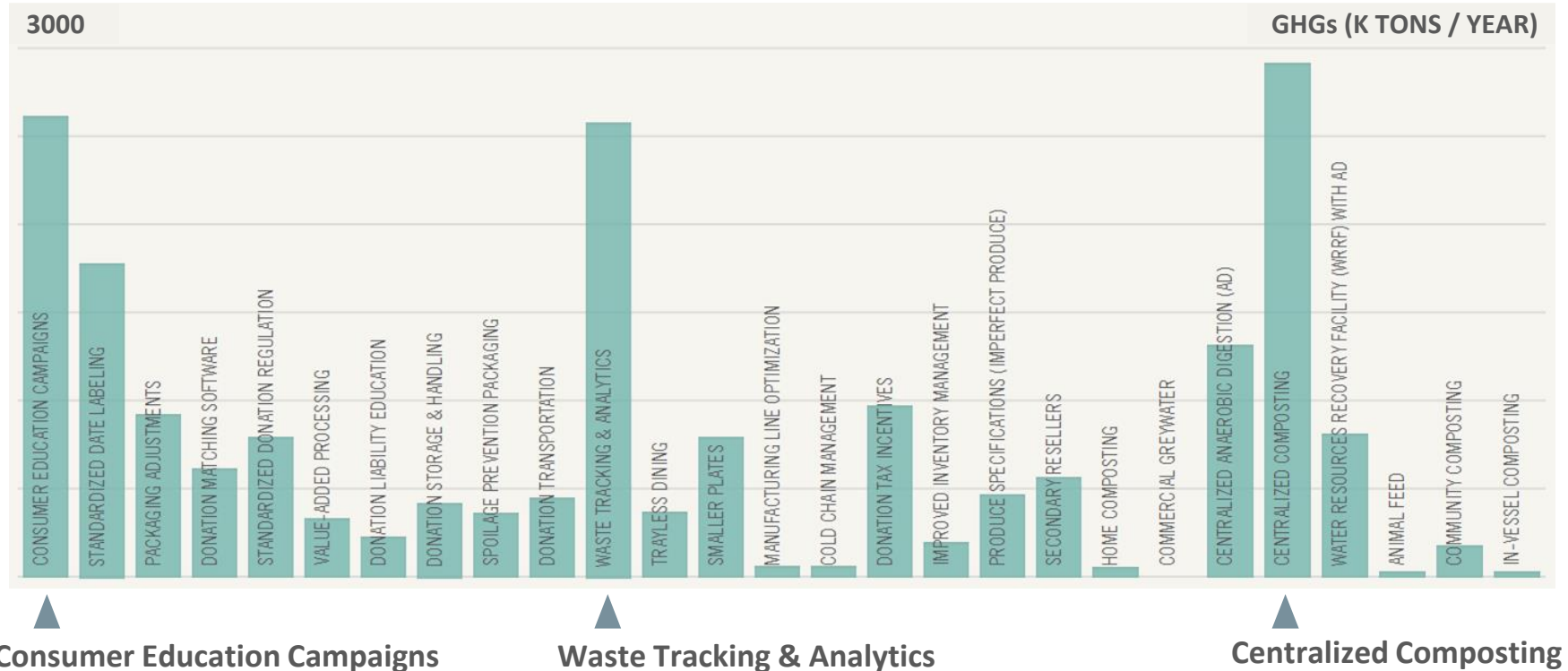

ReFED Roadmap 2016

The U.S. wastes 40%, or 63 million tons, of food annually

Report evaluated potential of solutions to achieve U.S. 2030 goal

ReFED methodology calculates FLW impact by solution

3000

GHGs (K TONS / YEAR)

- CONSUMER EDUCATION CAMPAIGNS
- STANDARDIZED DATE LABELING
- PACKAGING ADJUSTMENTS
- DONATION MATCHING SOFTWARE
- STANDARDIZED DONATION REGULATION
- VALUE-ADDED PROCESSING
- DONATION LIABILITY EDUCATION
- DONATION STORAGE & HANDLING
- SPOILAGE PREVENTION PACKAGING
- DONATION TRANSPORTATION
- WASTE TRACKING & ANALYTICS
- TRAYLESS DINING
- SMALLER PLATES
- MANUFACTURING LINE OPTIMIZATION
- COLD CHAIN MANAGEMENT
- DONATION TAX INCENTIVES
- IMPROVED INVENTORY MANAGEMENT
- PRODUCE SPECIFICATIONS (IMPERFECT PRODUCE)
- SECONDARY RESELLERS
- HOME COMPOSTING
- COMMERCIAL GREYWATER
- CENTRALIZED ANAEROBIC DIGESTION (AD)
- CENTRALIZED COMPOSTING
- WATER RESOURCES RECOVERY FACILITY (WRRF) WITH AD
- ANIMAL FEED
- COMMUNITY COMPOSTING
- IN-VESSEL COMPOSTING

Consumer Education Campaigns   **Waste Tracking & Analytics**   **Centralized Composting**

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ReFED is updating methodology to create a 'Roadmap 2.0'

Roadmap 2.0 is informed by stakeholder use of 2016 Roadmap

✓ **What works well:**
  ○ Pairing knowledge of where FLW occurs with the most economic and high-impact solutions.
    ■ Helps when prioritizing investment and efforts
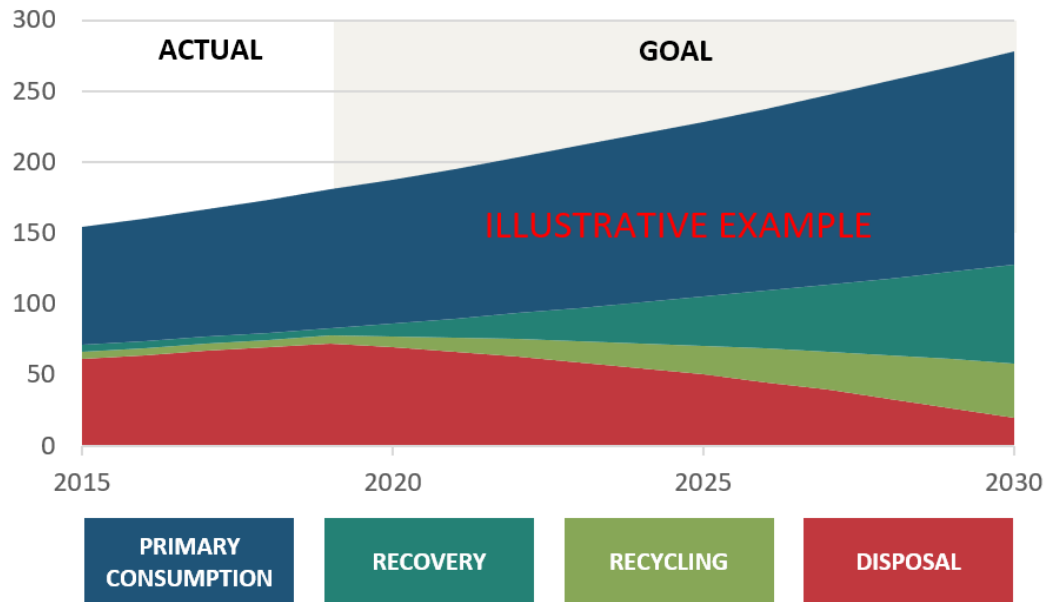
+ **Opportunity for Improvement:**
  ○ More granular data is needed to drive decision-making
  ○ Ability to track progress over time
  ○ Quantify FLW by Cause (Reasons *WHY* food waste occurs) *e.g.*
    ■ Unharvested produce on-farm due to labor shortages
    ■ Residential food waste caused by date label confusion

**Action Guides
2018**

ReFED

ReFED's 2020 methodology will include significant improvements

- **Digital first**

- **Improved data granularity**
  - (e.g. FLW by year, food type, sector, cause, destination)

- **Ability to track progress over time**

- **Refreshed list of solutions**

- **Ability to break down solution benefits by actor**
  - (e.g. financial benefit to consumers vs grocery retailers)

- **APEC economies can replace U.S.-specific datasets with their own**

U.S. FOOD WASTE TRACKER

Million Tons

ACTUAL   GOAL

ILLUSTRATIVE EXAMPLE

| PRIMARY CONSUMPTION | RECOVERY | RECYCLING | DISPOSAL |

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