

# sightlines

a **GORDIAN**® company

# Chapman University

## FY18 Sustainability Solutions Presentation

March 2020

- University of the Sciences in Philadelphia
- University of Toledo
- University of Vermont
- University of Washington
- University of West Florida
- University of Wisconsin - Madison
- Vanderbilt University
- Virginia Commonwealth University
- Wake Forest University
- Washburn University
- Washington State University
- Washington State University - Tri-Cities Campus
- Washington State University - Vancouver
- Washington University in St. Louis
- Wayne State University
- Wellesley College
- Wesleyan University
- West Chester University
- West Virginia Health Science Center
- West Virginia University
- Western Oregon University
- Westfield State University
- Widener University
- Williams College
- Worcester Polytechnic Institute
- Worcester State University



# Comprehensive Facilities Intelligence Solutions



## FACILITIES BENCHMARKING & ANALYSIS

Take control of your facilities and make the case for change without the guesswork



## FACILITIES ASSESSMENT & PLANNING

Plan and execute capital investment plans that are inclusive, credible, flexible, affordable and sustainable



## SPACE UTILIZATION

Ensure your space is working up to its full potential



## SUSTAINABILITY SOLUTIONS

Measure and improve environmental stewardship

# Campus Demographics

---



## Institutional Data

- **Total campus GSF – \*3.4 Million**
  - **Buildings awaiting GSF validation:**  
*16355 Laguna Canyon RD, 9800 Muirland Blvd, 215 N Broadway, 32 BlackSwan, 306 W 3d St, 39115 Trade Center 203B&203A, Musco Presidents House (28 Canyon Fairway DR)*
- **Campus acreage – 76 acres**
- **FTE's of students, faculty, and staff – 10,442**

# Components of Chapman's Emissions Profile



## Scope 1 – Direct GHGs

- On-Campus Stationary (Natural Gas; Oil)
- *\*Vehicle Fleet*
- *\*Refrigerants*
- Agriculture

## Scope 2 – Upstream GHGs

- Purchased Electricity

## Scope 3 – Indirect GHGs

- Faculty/Staff/ Student Commuting
- Directly Financed Air & Ground Travel
- Study Abroad Travel
- *\*Solid Waste*
- Wastewater
- *\*Paper Purchasing*
- Transmission & Distribution Losses



# Emissions Summary

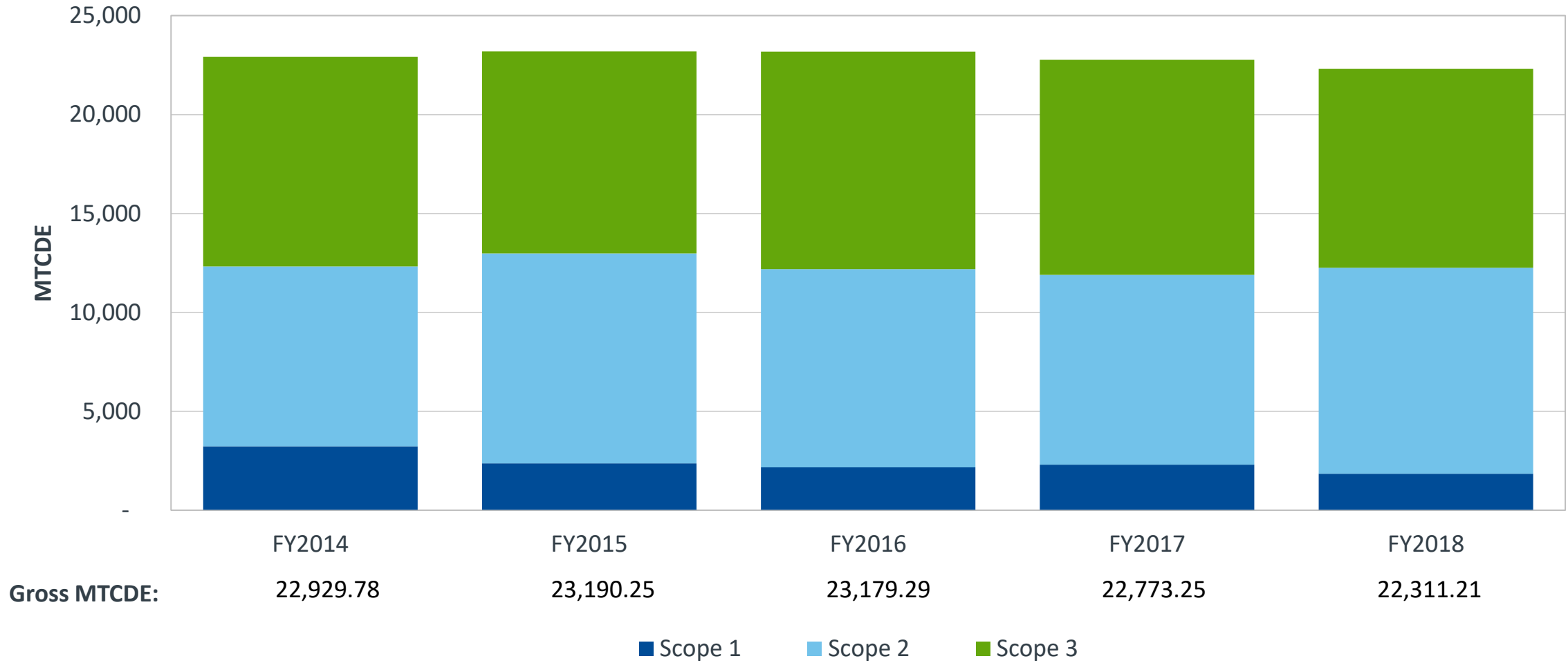


# FY18 Gross Emissions: 22,311 MTCDE



Chapman's Emissions have stayed consistent over duration of analysis

Total Gross Emissions Over Time

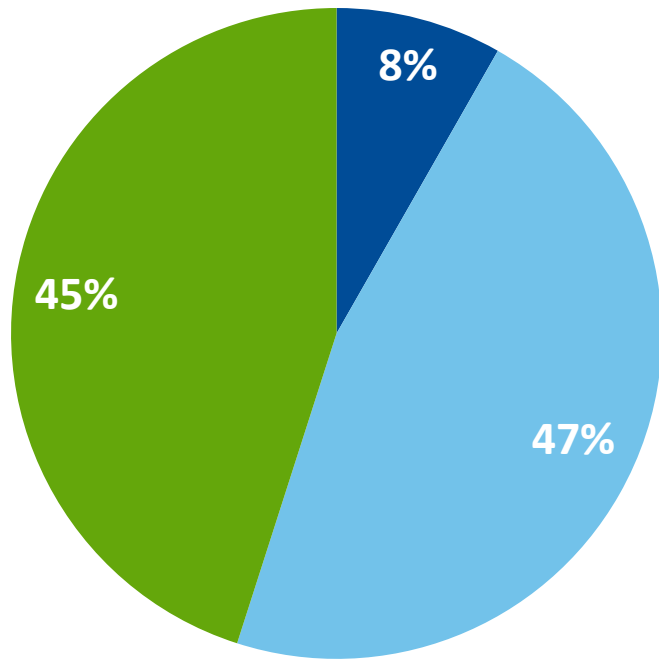


# Distribution of Gross Emissions by Level of Control



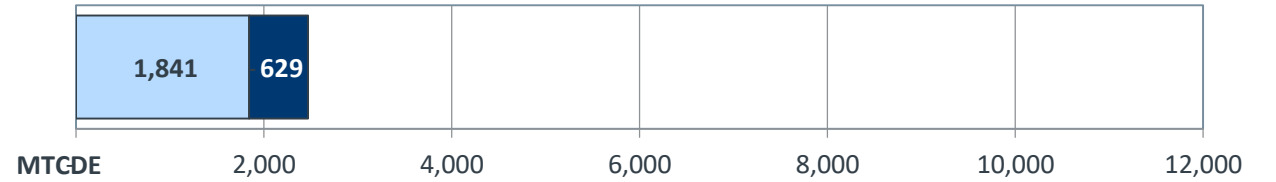
FY2018 emissions by source and scope

Emissions by Scope



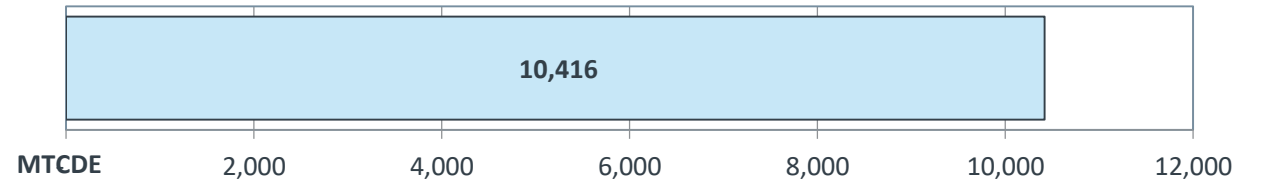
■ Scope 1   ■ Scope 2   ■ Scope 3

Scope 1 Sources



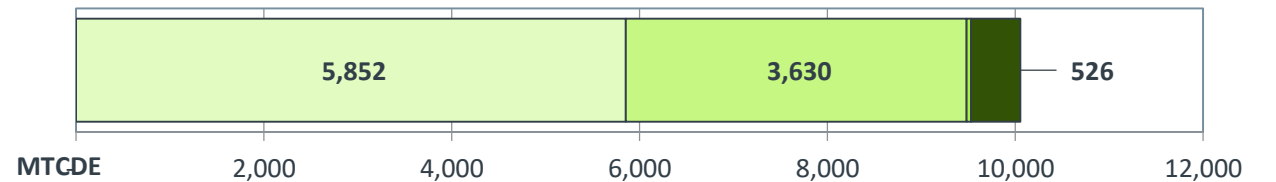
□ Other On-Campus Stationary   □ Direct Transportation   □ Refrigerants & Chemicals   ■ Agriculture

Scope 2 Sources



□ Purchased Electricity

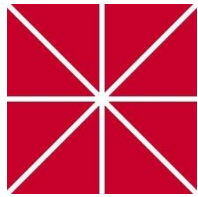
Scope 3 Sources



□ Commuting   □ Travel   □ Waste/Wastewater   ■ Paper Purchases   ■ T&D Losses

sightlines

a GORDIAN® company



# Emission Breakout



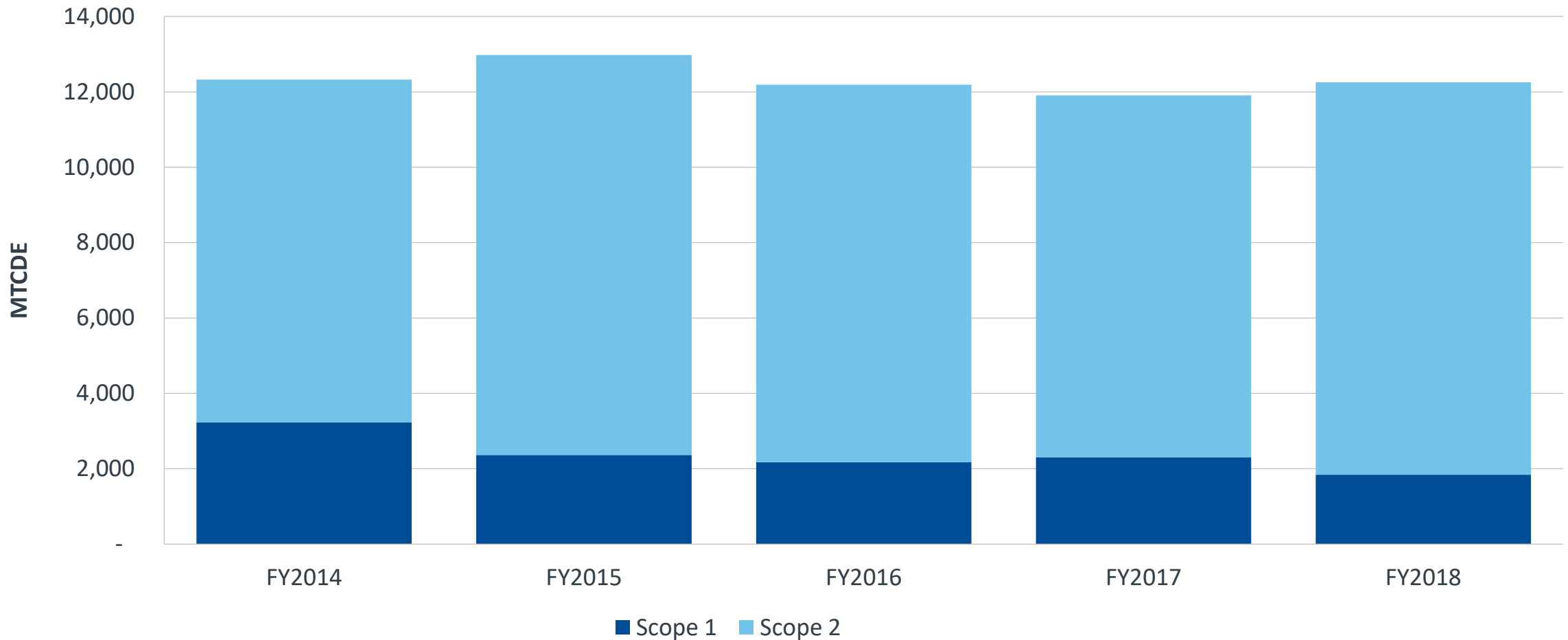


# Total Utility Emissions



Scope 1 emissions have decreased by 43%, Scope 2 emissions have increased by 14%

Total Utility Emissions Over Time

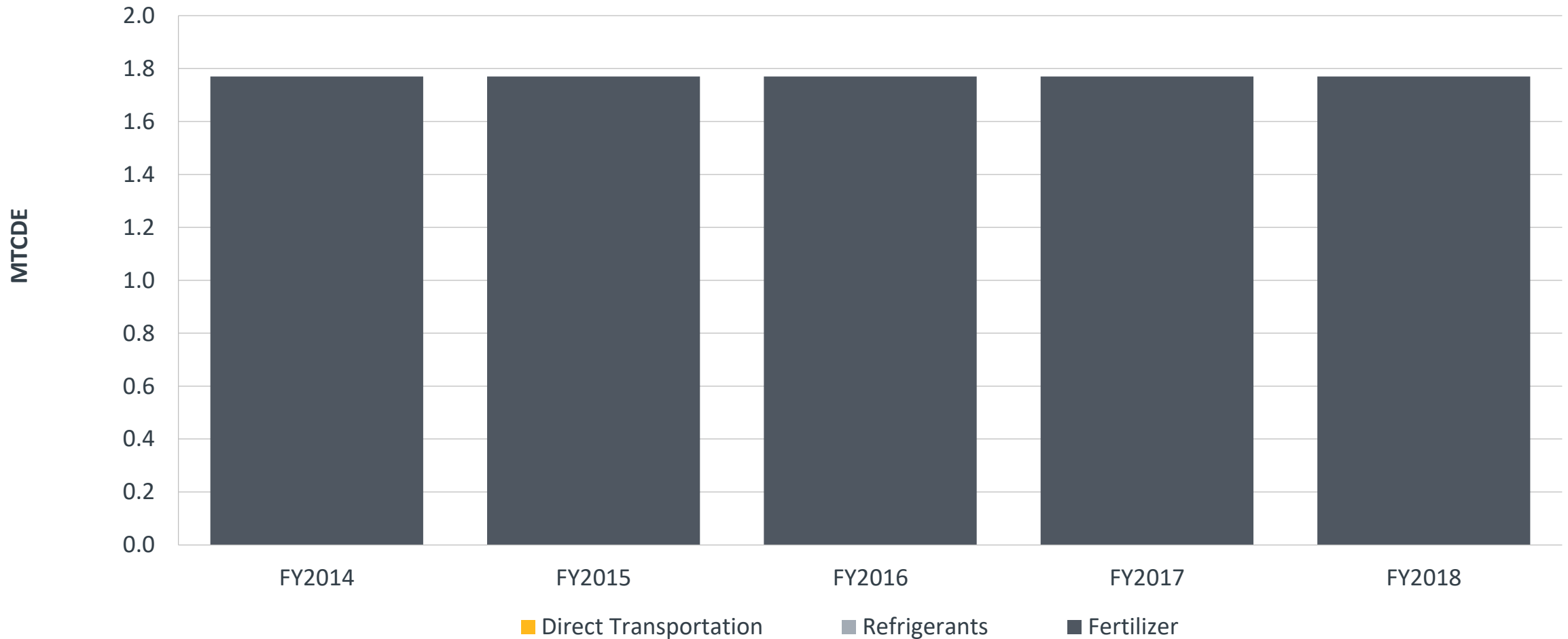


# Other Scope 1 Emissions



Only fertilizer emissions are shown, FY18 data used for all years

Other Scope 1 Emissions Over Time

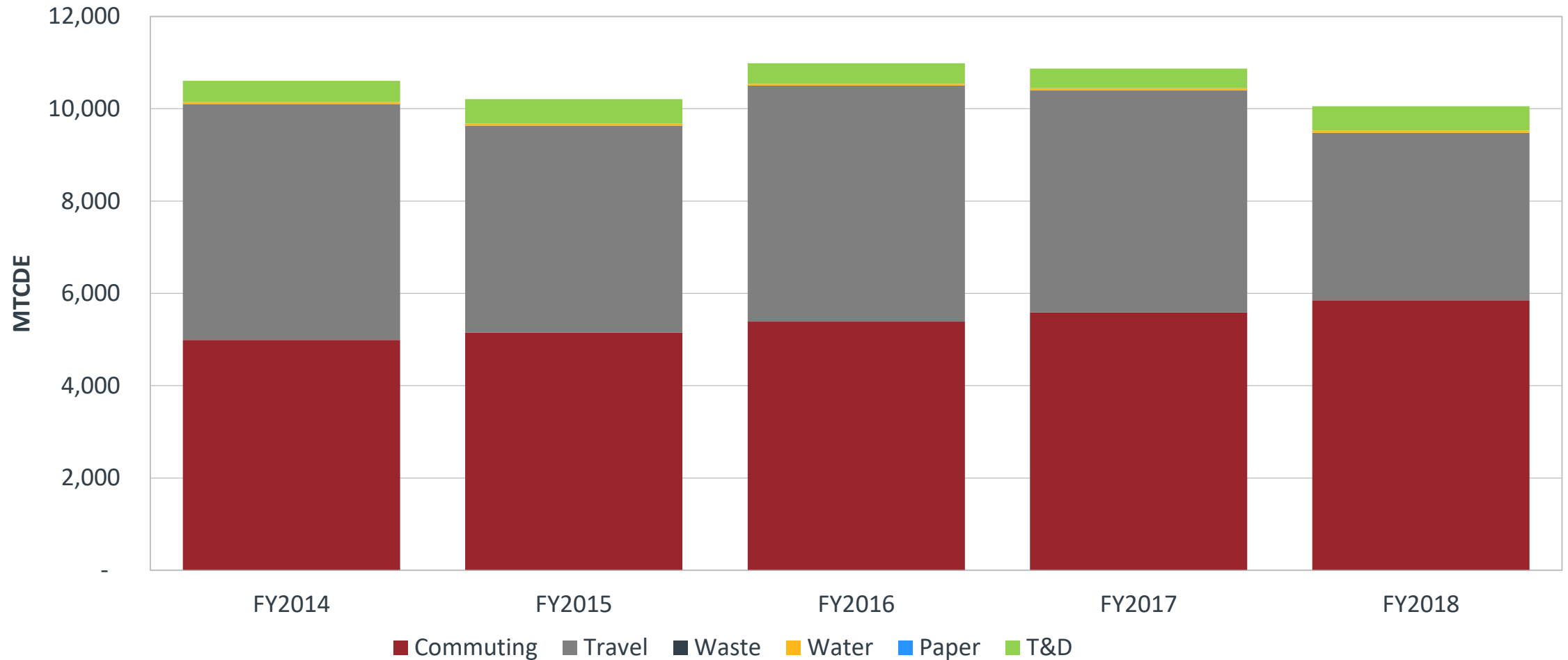


# Scope 3 Emissions



Commuting and travel make up 88% of Scope 3 emissions

Scope 3 Emissions Over Time

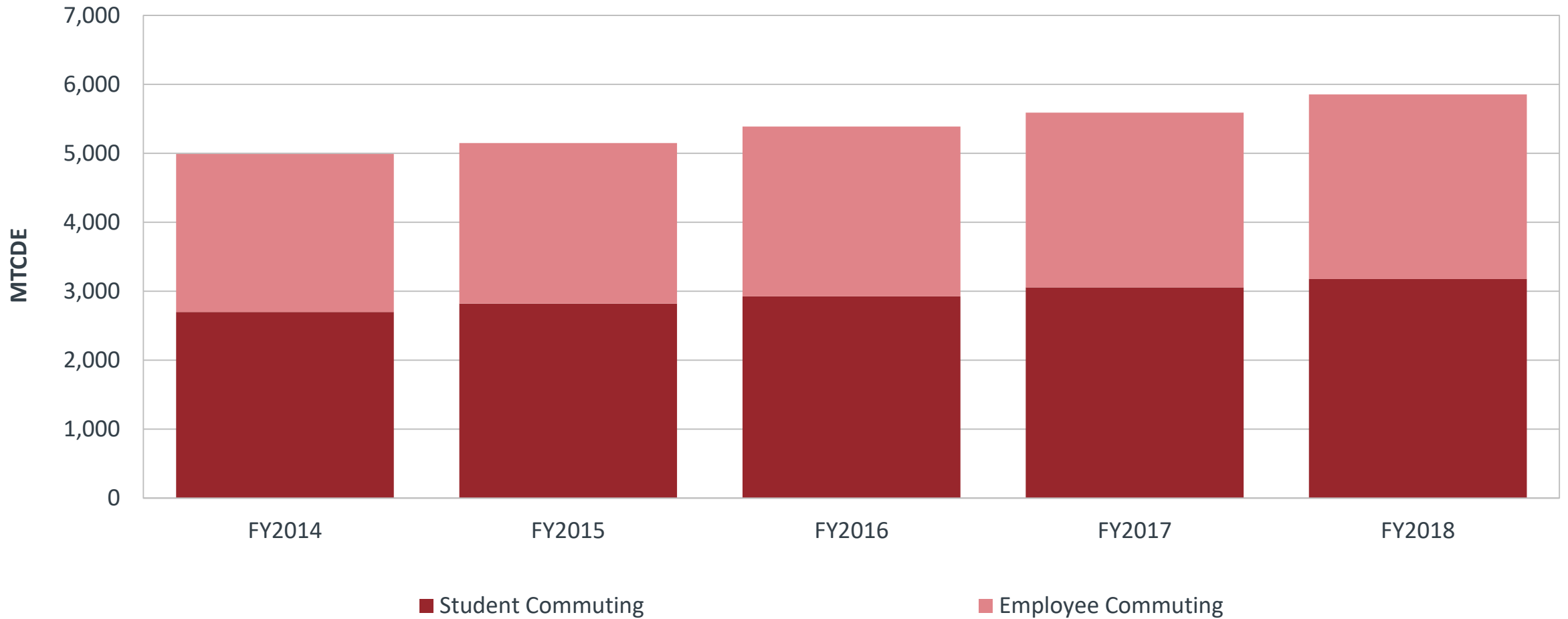


# Updated Commuting Data



Commuting emissions have increased by 17% since baseline year

Commuting Emissions

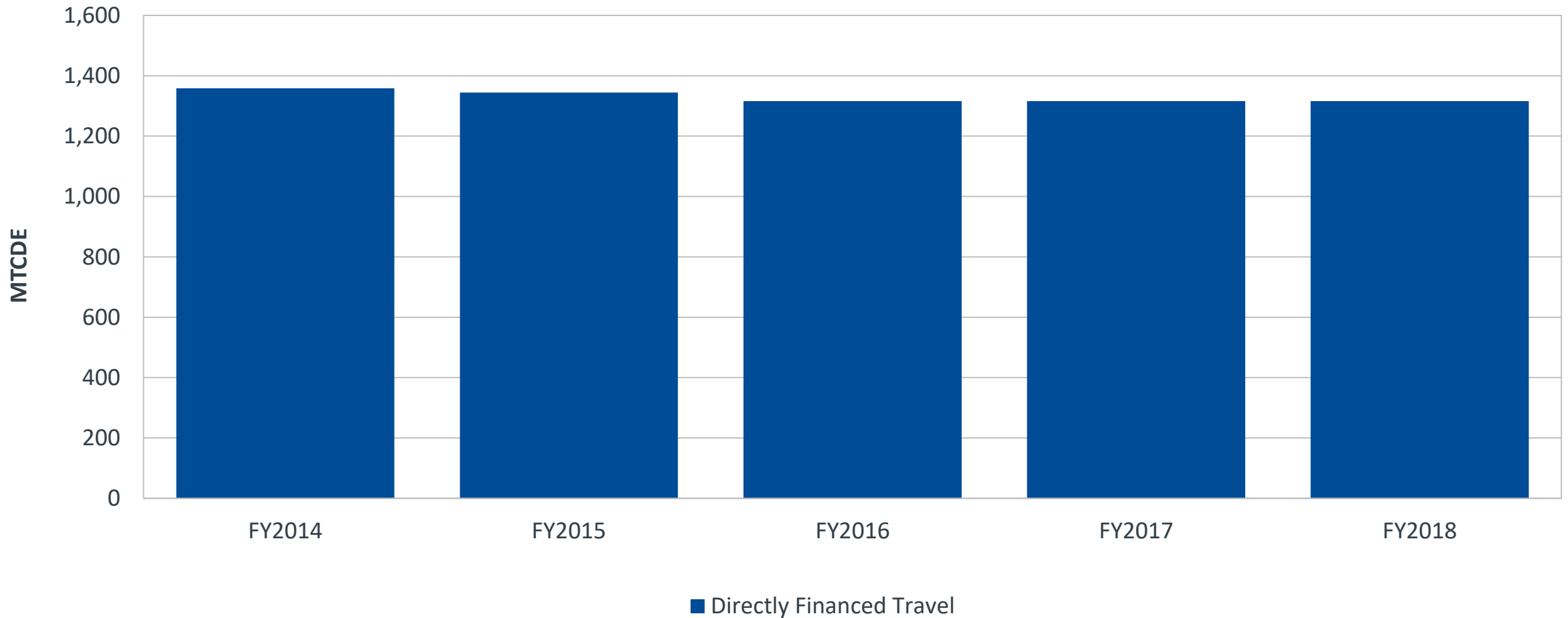


# Directly Financed Travel Profile



Directly Financed Travel emissions have decreased 3% since baseline year

Chapman's Travel Emissions

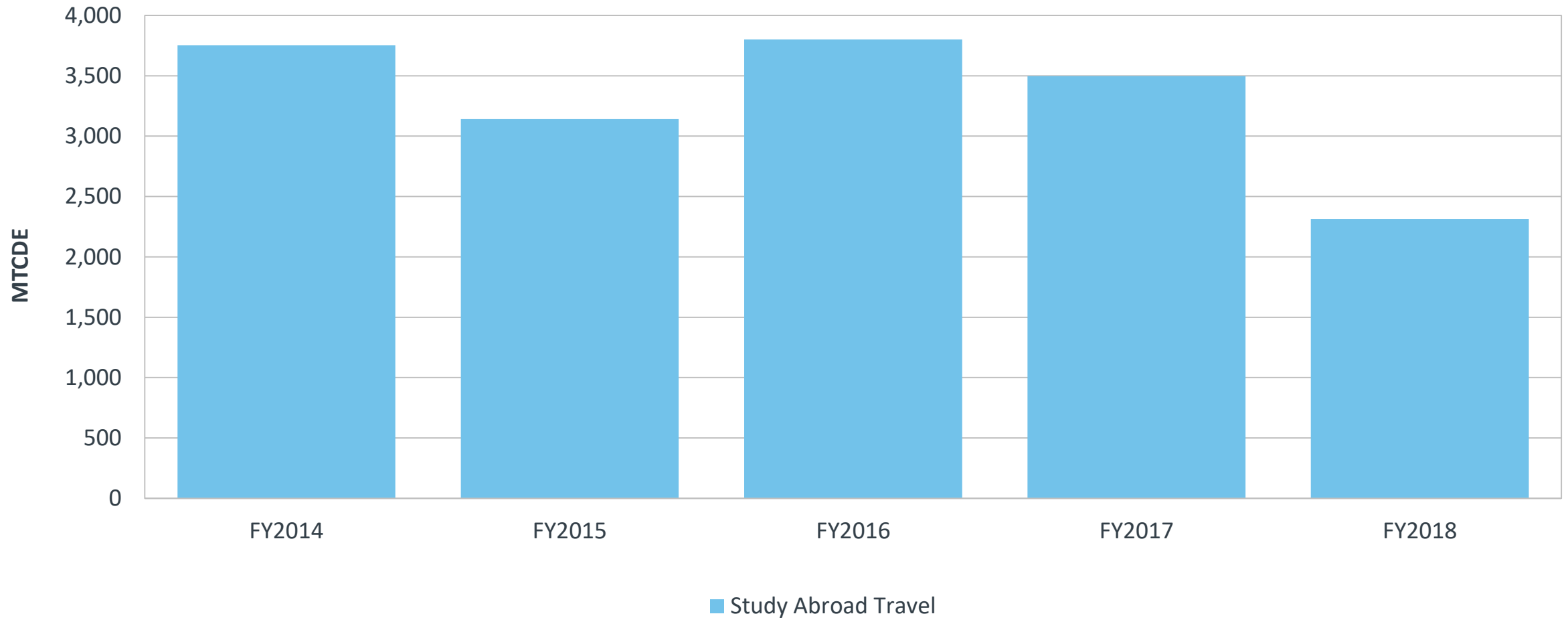


# Study Abroad Travel Profile



Study Abroad emissions have decreased 38% since baseline year

Chapman's Study Abroad Emissions

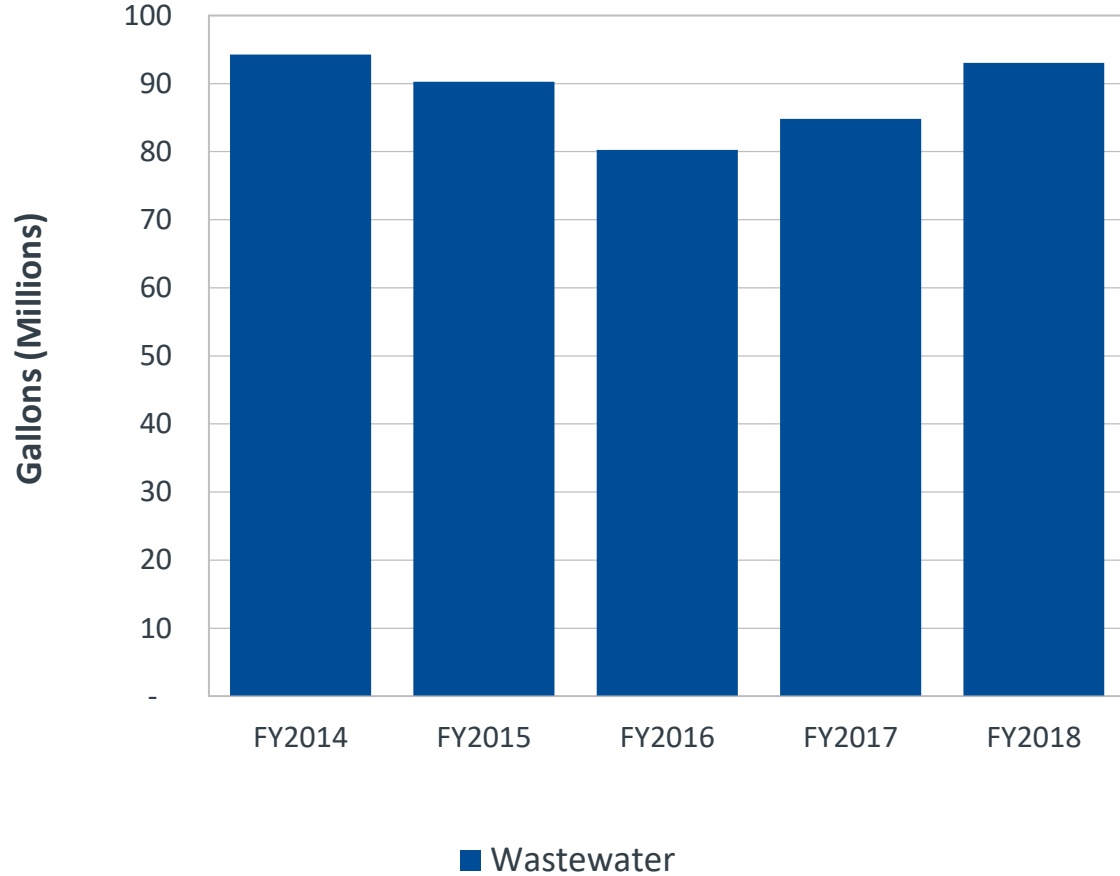


# Water Profile

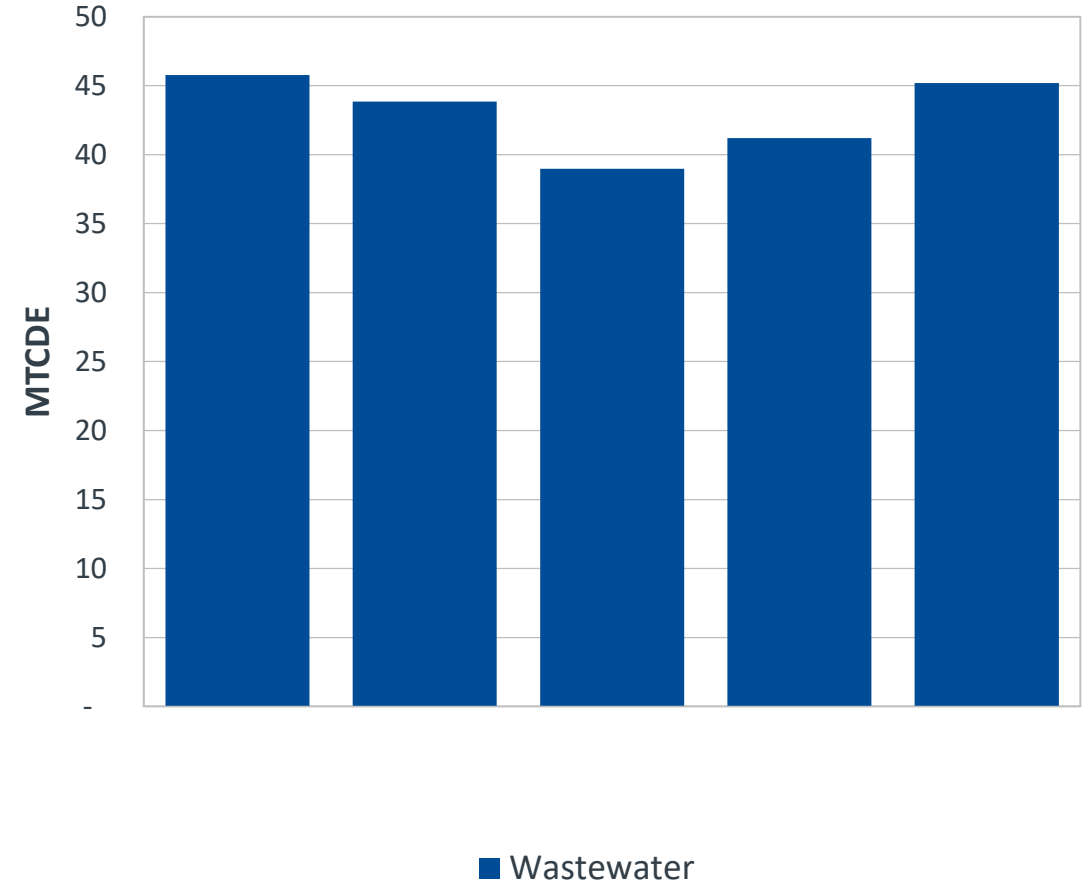


Wastewater production and emissions has increased from FY17 similar to FY14 levels

### Total Wastewater Over Time



### Waste Water Emissions





Questions & Discussion