

UNIVERSITY OF PENNSYLVANIA

CLIMATE AND SUSTAINABILITY ACTION PLAN 3.0
ANNUAL REPORT FY20

UNIVERSITY OF
PENNSYLVANIA
CSAP 3.0
ANNUAL REPORT
OVERVIEW

UNIVERSITY COUNCIL MEETING
MARCH 24, 2021

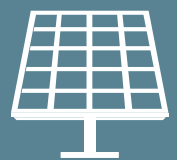
CSAP CHARGE

CARBON NEUTRAL BY 2042

100% carbon neutral campus by 2042.



Expand the scope of sustainability research in Penn's academic centers, and connect students to Penn's abundant resources in this field



Continue to reduce carbon emissions and explore expanded use of renewable energy to mitigate the impacts of climate change



Embrace circular economy principles to reduce waste and single-use products



Make sustainable choices in transportation, purchasing, and business operations



Inform, educate, and empower the Penn community to participate in Penn's climate change and sustainability goals

7 INITIATIVES

ACADEMICS

UTILITIES & OPERATIONS

PHYSICAL ENVIRONMENT

WASTE MINIMIZATION & RECYCLING

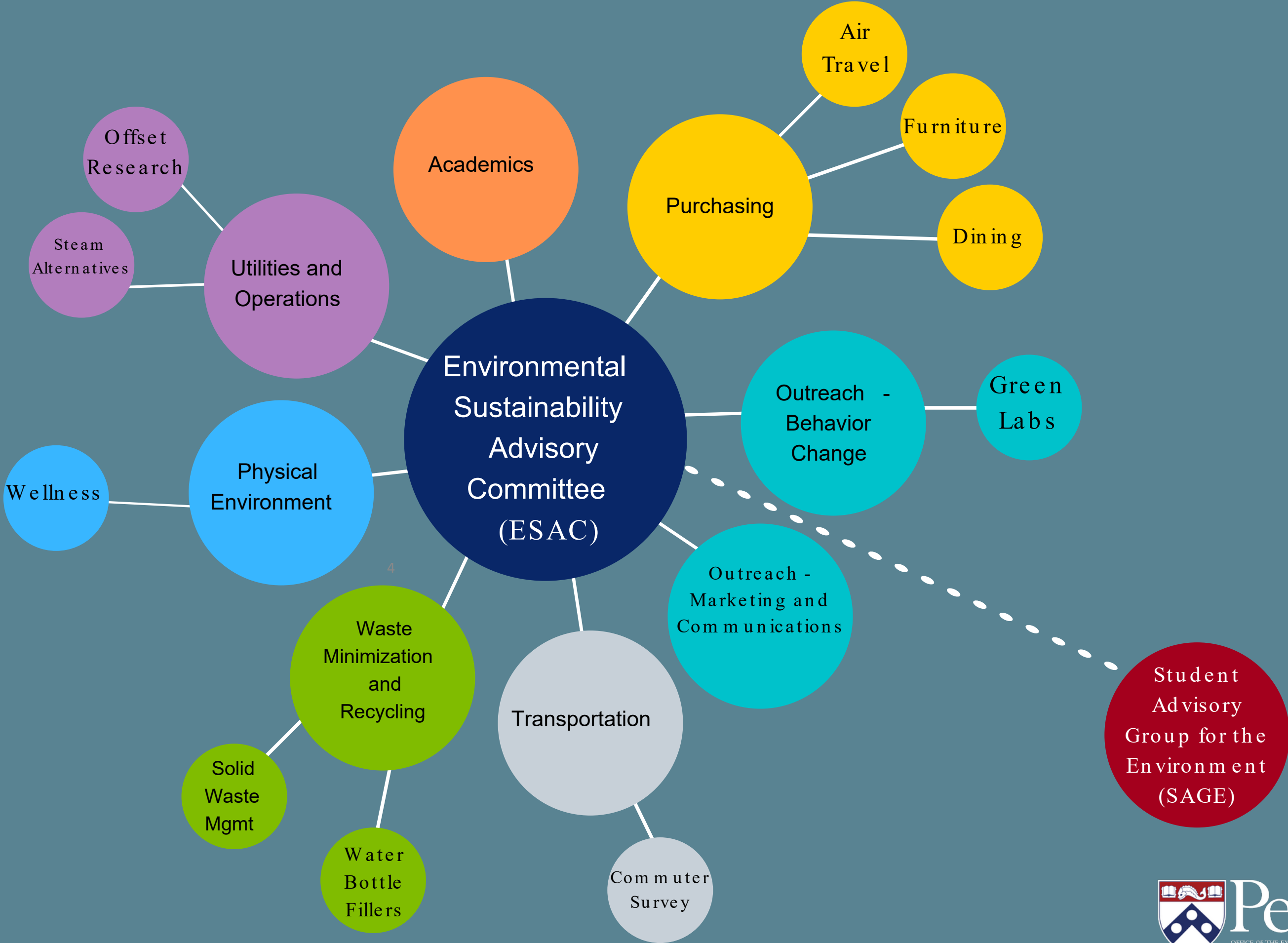
PURCHASING

TRANSPORTATION

OUTREACH & ENGAGEMENT



ENVIRONMENTAL SUSTAINABILITY ADVISORY COMMITTEE (ESAC)



ACADEMICS

30%

PERCENTAGE OF THE PENN STUDENT POPULATION ENROLLED IN SUSTAINABILITY COURSES DURING THE 2019-2020 ACADEMIC YEAR

CIRCE

THE FACULTY SENATE COMMITTEE ON THE INSTITUTIONAL RESPONSE TO THE CLIMATE EMERGENCY WAS ESTABLISHED IN DECEMBER '19

400+

NUMBER OF COURSES IN PENN'S SUSTAINABILITY COURSE INVENTORY ACROSS ALL SCHOOLS & DEPARTMENTS

UTILITIES & OPERATIONS

11

NUMBER OF ENHANCED
RECOMMISSIONING STUDIES
THAT ARE COMPLETE AND BEING
IMPLEMENTED ⁶

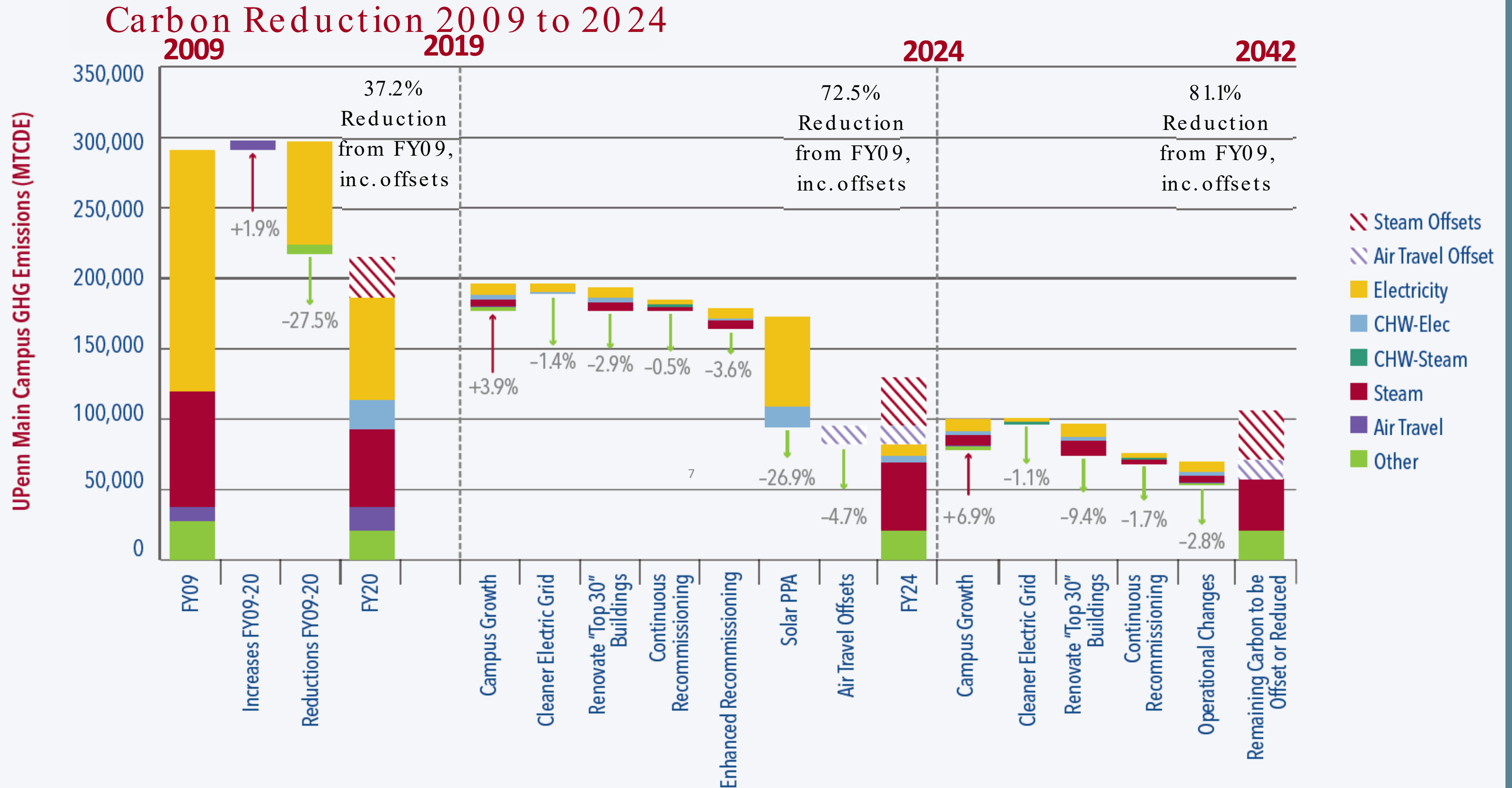
75%

% OF CAMPUS ELECTRICITY
DEMAND THAT WILL BE OFFSET BY
PENN'S SOLAR POWER PURCHASE
AGREEMENT STARTING IN 2023

41%

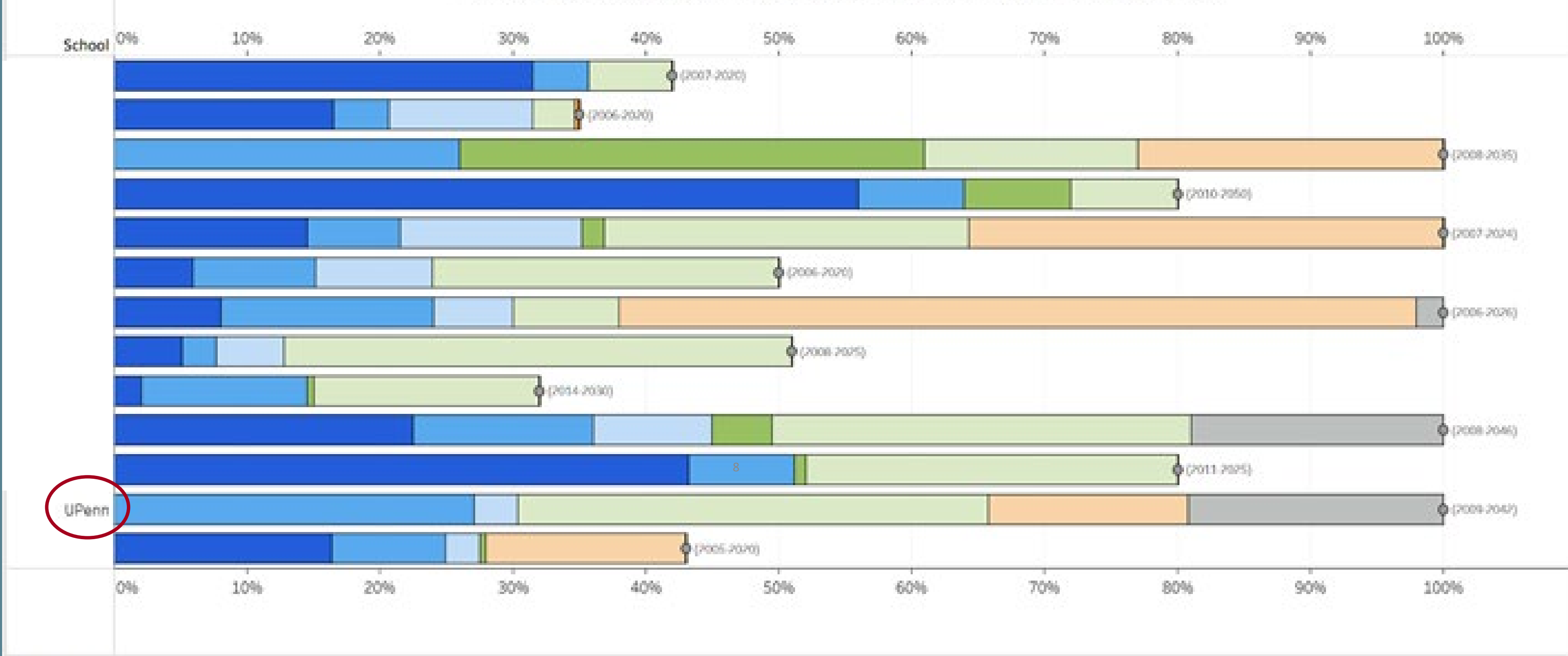
PERCENT REDUCTION IN OVERALL
EMISSIONS SINCE 2009

PATH TO CARBON NEUTRAL



IVY PLUS SUSTAINABILITY CONSORTIUM: CLIMATE GOALS & STRATEGIES

Planned Percent Scope 1 and 2 Emissions Reduction Relative to School's Own Baseline (Bars) and Goal (Dots)



Reduction Methods

- Central Plant Efficiency & Fuel Switching
- Building Efficiency & Conservation
- Cleaner Grid
- Onsite Renewable Energy
- Offsite Renewable Energy
- Unbundled RECs
- Carbon Offsets
- Other & Unknown

PHYSICAL ENVIRONMENT

27

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) CERTIFIED BUILDINGS TO DATE

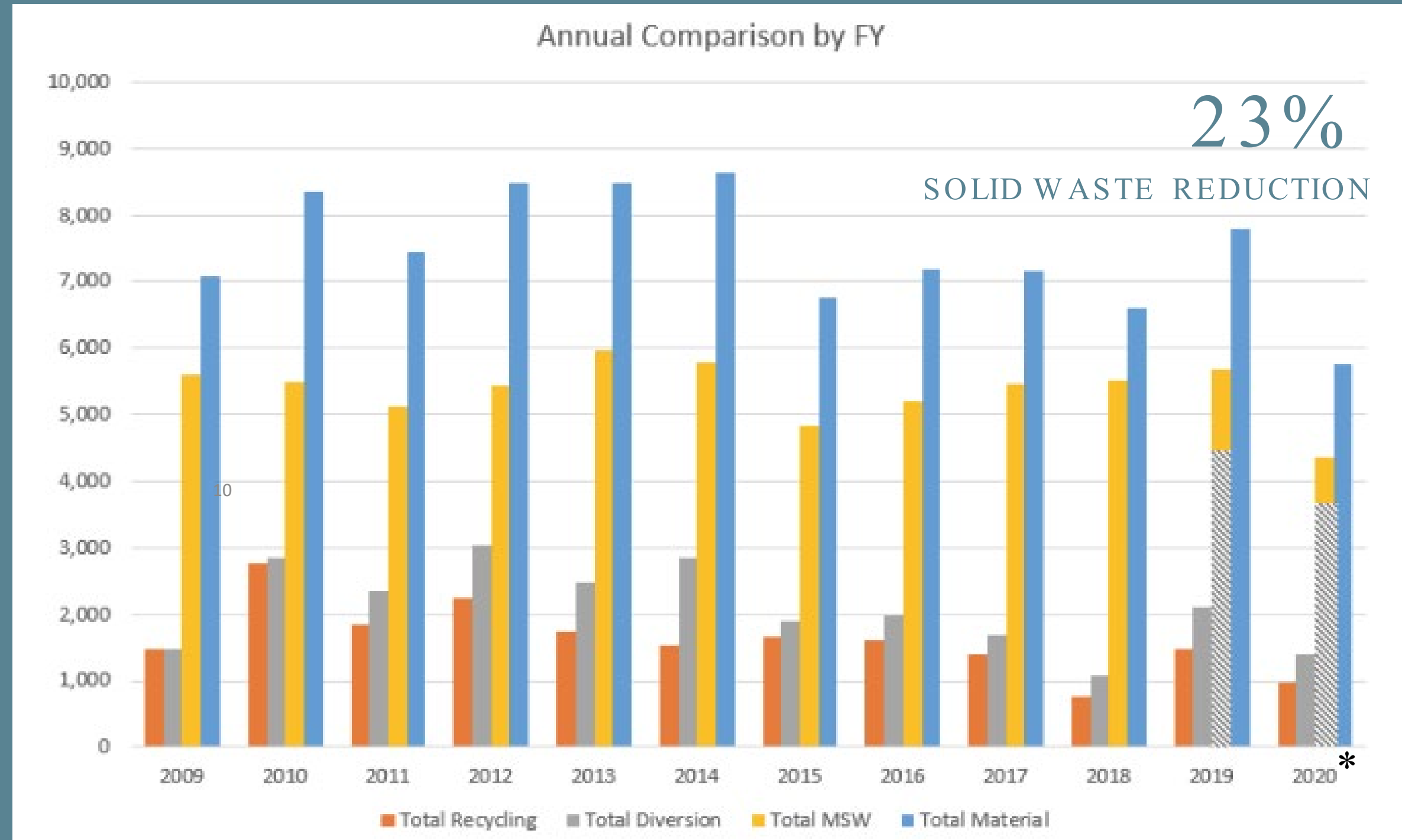
BIRD-FRIENDLY

PENN'S LANDSCAPE ARCHITECTURE STAFF AND STUDENT ECO-REPS DEVELOPED BIRD-FRIENDLY DESIGN GUIDELINES

VAGELOS DESIGN APPROVED

VAGELOS LABORATORY FOR ENERGY SCIENCE AND TECHNOLOGY WAS PRESENTED AND APPROVED AT THE FALL TRUSTEES MEETING

WASTE MINIMIZATION & RECYCLING



DINING AND SUSTAINABILITY DURING COVID



WHAT PENN IS DOING

- ✓ Has given out reusable bags to students to carry home food from the dining halls
- ✓ Has re-introduced the Green2Go reusable clamshell program
- ✓ Has made disposable utensils available by request only (in-person and on the app)
- ✓ Worked to ensure as many items as possible that are recyclable given supply chain constraints
- ✓ Has created and posted signage in college houses, dining locations, and on social media outlining how to recycle packaging materials

11



HOW YOU CAN HELP

- ✓ Take your reusable bag with you to the dining hall each time you go to pick up a meal
- ✓ Utilize the Green2Go program at the stations where offered!
- ✓ Refuse disposable utensils from dining halls in favor of reusable cutlery
- ✓ Sort your dining hall waste properly into the recycling and trash streams

Thank you for your help in keeping our campus safe, clean, and sustainable!

PURCHASING - AIR TRAVEL

10 %

ESTIMATED AMOUNT OF PENN'S
TOTAL CARBON FOOTPRINT IS
COMPRISED OF TRAVEL BY PENN'S
FACULTY, STAFF & STUDENTS

FALL
2021

PENN IS SET TO LAUNCH A PILOT
PROGRAM TO TRACK AND
CHARGE SCHOOLS & CENTERS AN
AIR TRAVEL CARBON FEE TO FUND
VERIFIED CARBON OFFSETS

TRANSPORTATION

47

NUMBER OF DOCKS AT THE 2 NEW INDEGO BIKE SHARE STATIONS INSTALLED AT 34TH & CHESTNUT AND 34TH & SPRUCE; THERE ARE NOW 142 DOCKS TOTAL ON CAMPUS

282

NUMBER OF STAFF AND FACULTY PARTICIPANTS IN THE BIKE COMMUTER REIMBURSEMENT PROGRAM DURING THE 2019 TAX YEAR

8

NUMBER OF ELECTRIC VEHICLE CHARGING STATIONS INSTALLED IN FY20 ; THERE ARE NOW 12 STATIONS TOTAL ON CAMPUS

OUTREACH & ENGAGEMENT

14

NUMBER OF COMMITTED GREEN LABS ON CAMPUS

215

NUMBER OF ENERGY EFFICIENT ULT FREEZERS PURCHASED SINCE THE ULT FREEZER REBATE PROGRAM'S INCEPTION

71

NUMBER OF OFFICES CERTIFIED UNDER THE GREEN OFFICE PROGRAM

335

NUMBER OF STAFF AND FACULTY WHO HAVE TAKEN THE SUSTAINABILITY 101 KNOWLEDGELINK MODULE

CLIMATE WEEK AT PENN



CLIMATE WEEK @ PENN, FALL 2020



INDIVIDUAL PARTICIPATIONS IN THE WEEK'S EVENTS



NGOS AND COMMUNITY ORGANIZATIONS INVOLVED WITH CLIMATE WEEK EVENTS



UNIQUE EVENTS ORGANIZED BY 28 SEPARATE PENN ORGANIZATIONS ACROSS 7 SCHOOLS



15

GET ENGAGED WITH PENN SUSTAINABILITY



@PennSustainability



@Penn Sustainability



@GreenPenn

Email: sustainability@upenn.edu

Website: sustainability.upenn.edu