

AIA 2030 COMMITMENT

Project Performance Data 2019



The AIA 2030 Commitment provides a framework to help firms evaluate the impact of project design on energy performance. It sets an industry wide goal to design carbon neutral buildings, developments and major renovations by 2030.

HDR signed the 2030 commitment in April 2009. As a signatory, HDR commits to design projects that are carbon neutral by 2030, and we commit to reporting the predicted energy performance for all of our projects that are under design each year. This Commitment also allows us to understand how our projects perform relative to the rest of the industry, to identify ways that we can improve our work, and to provide better service to our clients.

HDR has provided detailed reporting to the AIA since 2014. Our reporting for the past 6 years has shown that we continue to move our practice forward and improve our project energy performance year over year; however, it also shows that we are still falling short of the AIA 2030 Commitment targets.

As we move into 2020, the AIA 2030 target reduction increases to 80%, and we know the challenge with meeting the commitment will be even more difficult. As a firm, we know we can deliver the high performance, regenerative projects that are needed to make a difference, and we look forward to the challenge!



COLIN ROHLFING

Vice President

Director of Sustainable Development



Orange County Sanitation District
Orange County, California

LADWP Hoover Street Power Yard
Los Angeles, California

LADWP West LA Power Yard
Los Angeles, California

Westmead Hospital
Sydney, Australia



Summary

Our firm-wide predicted energy use reduction was 47.5%. We continue to improve year over year, however, we are below the industry average of 49%, and well short of the targets established by the 2030 Commitment.

Energy modeling has become part of our practice. We reported that over 90% of our portfolio would have an energy model, which exceeds the industry average and continues to put us in reach of our 100% energy modeling goal. The next step will be to implement energy modeling earlier into the design process for all of our projects.

None of our projects reported embodied carbon data. As we move forward, it will be imperative that we utilize Life Cycle Assessments to estimate and reduce the embodied carbon associated with the design and construction of our work.

2019 PROJECTS REPORTED

289

47.8 million GSF

183 projects new construction
45 million GSF

106 projects interior only
2.8 million GSF



2015

279

57.0 million SF

2016

333

45.2 million SF

2017

278

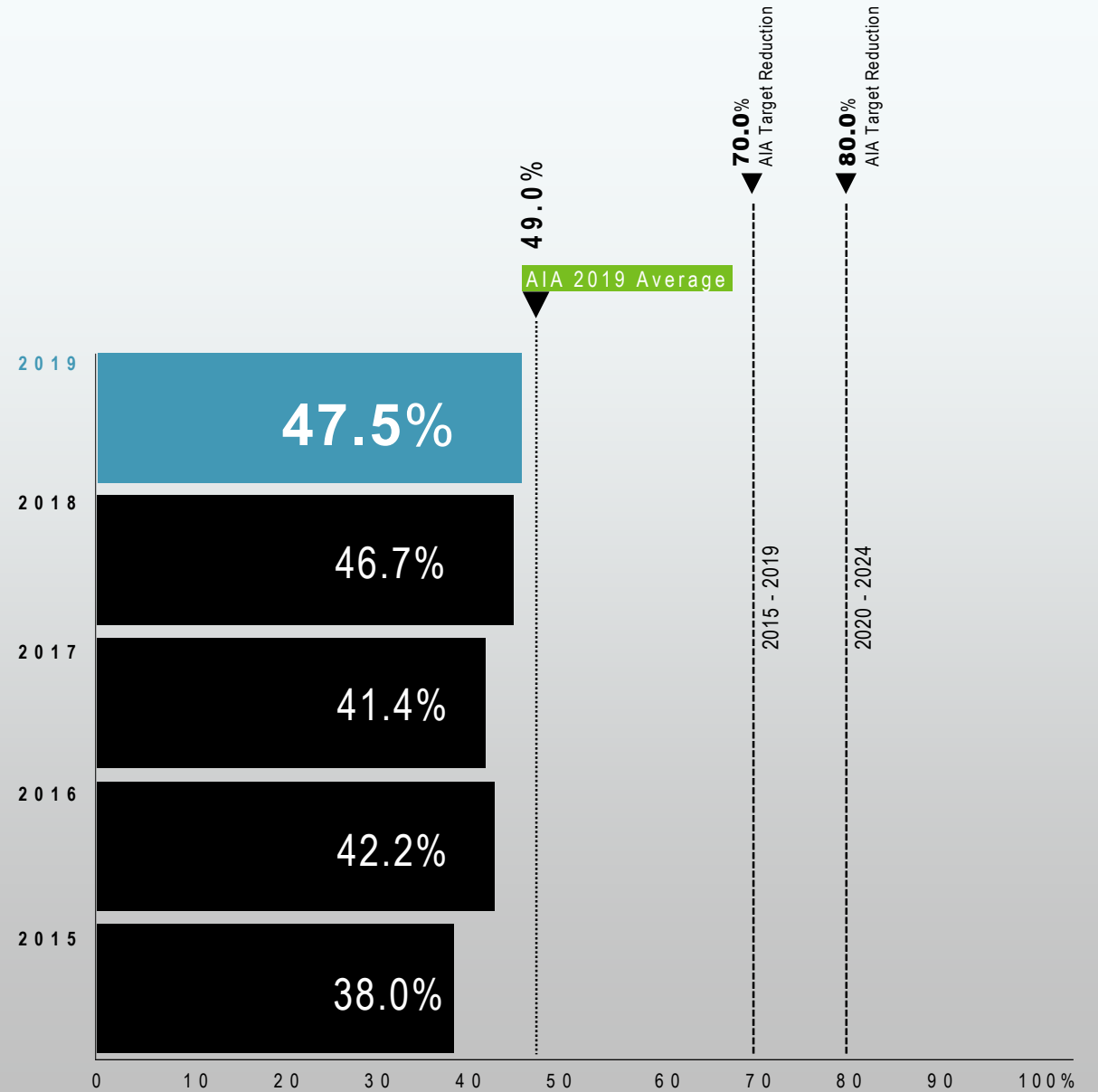
38.1 million SF

2018

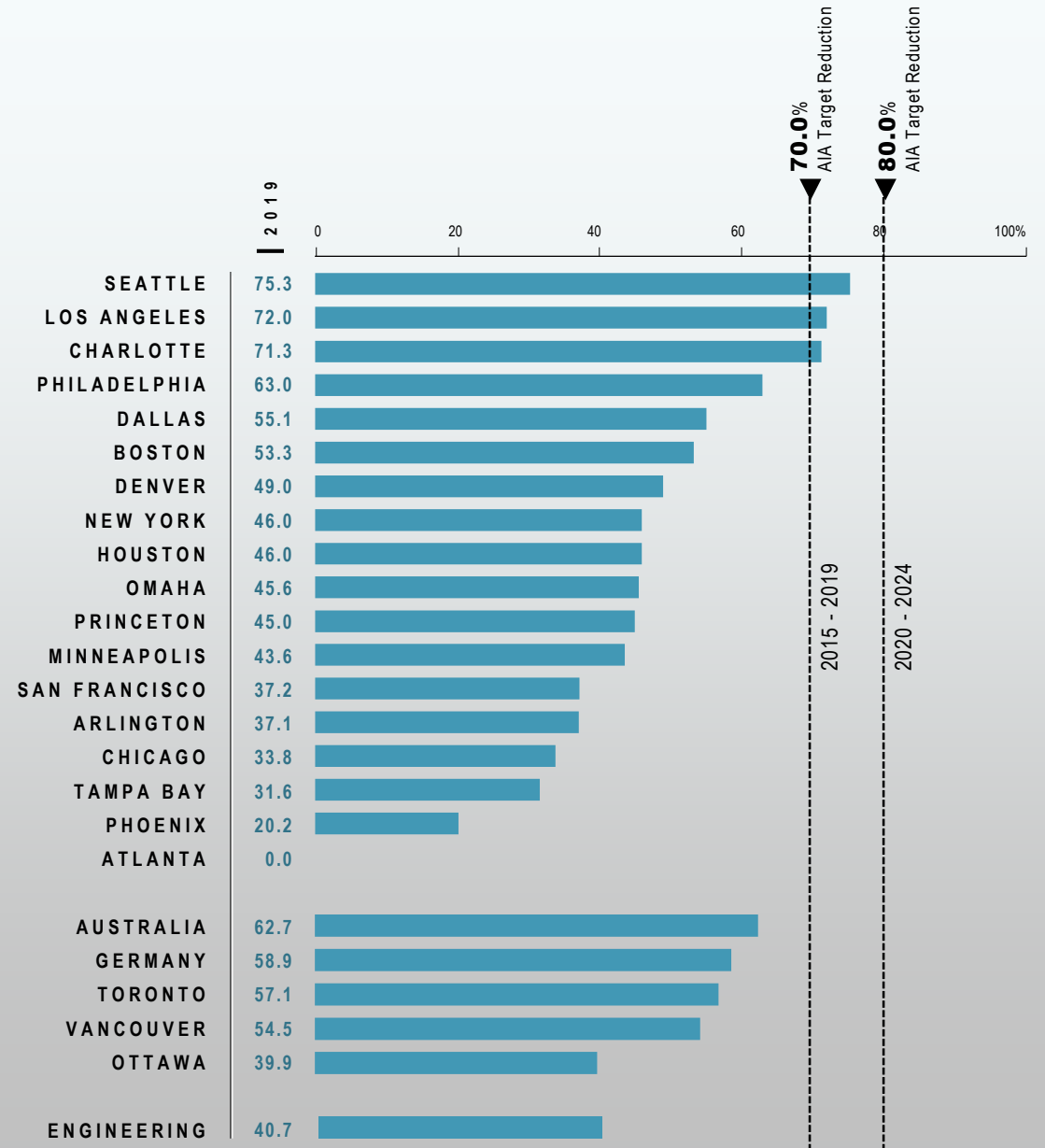
331

44.2 million SF

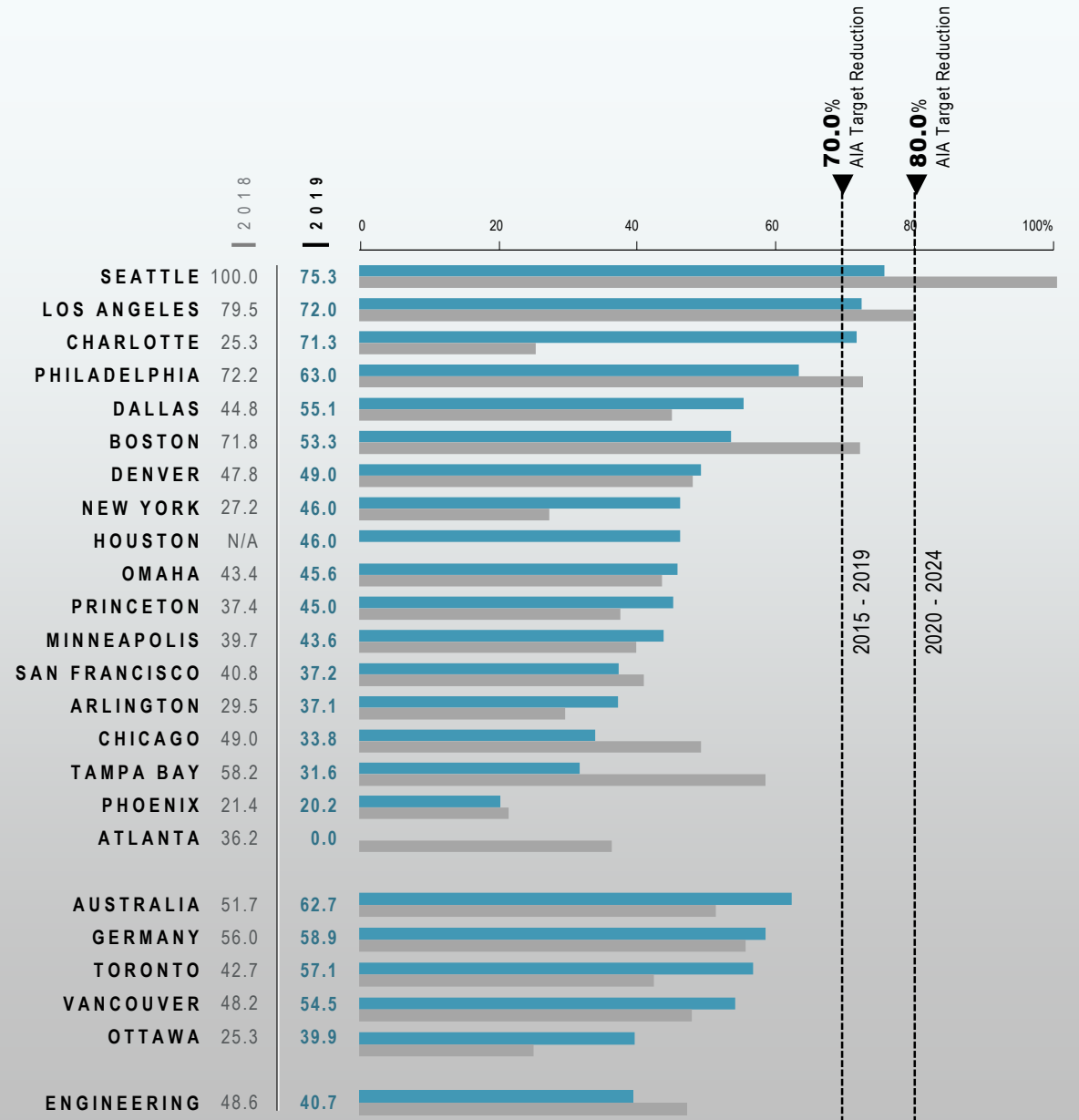
HDR PREDICTED ENERGY USE INTENSITY (pEUI) REDUCTION

pEUI
ReductionEnergy
ModelingLight Density
ReductionTop Performing
ProjectsOverview by
Market SectorGlobal
Overview

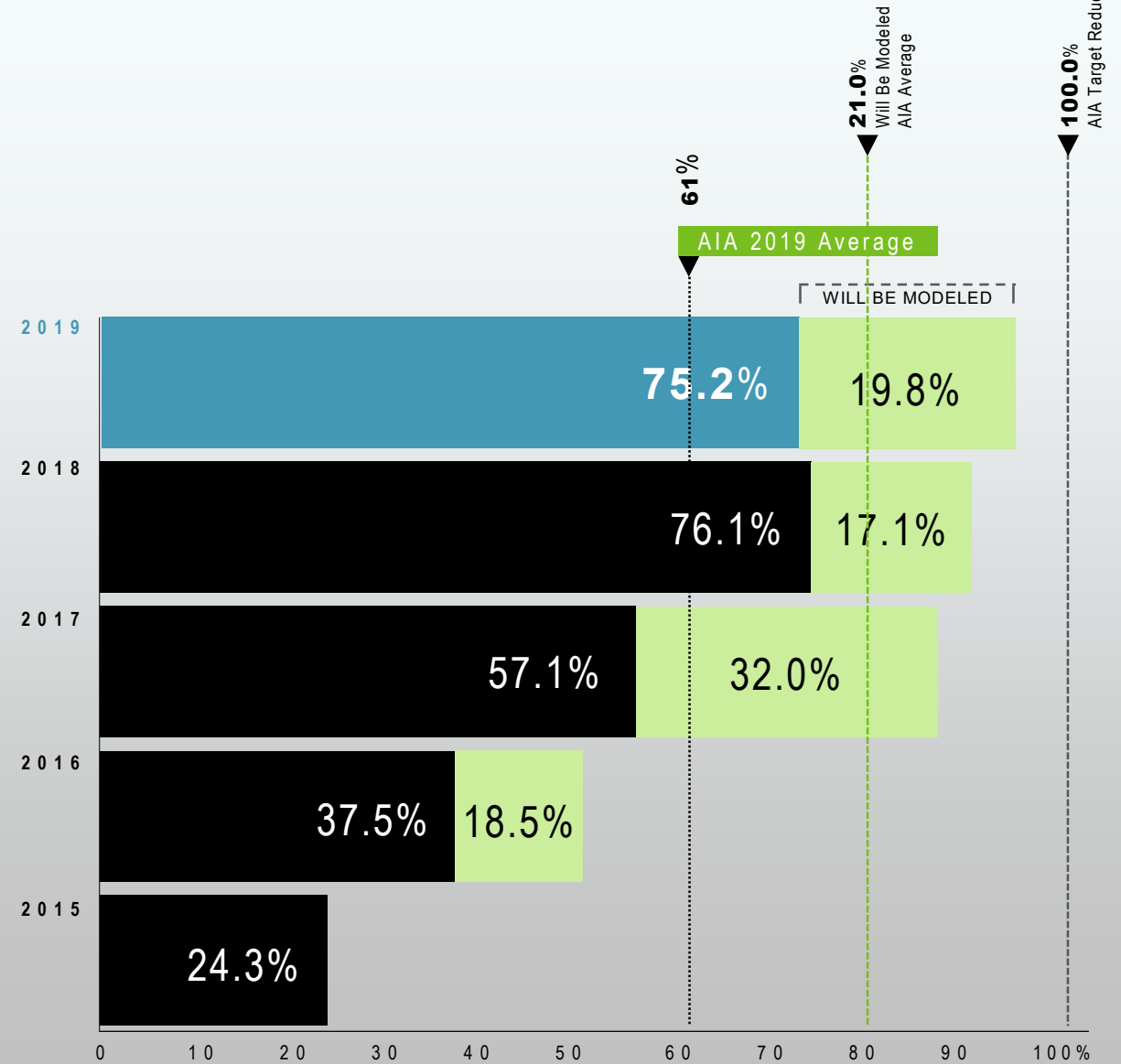
PREDICTED EUI REDUCTION BY OFFICE 2019

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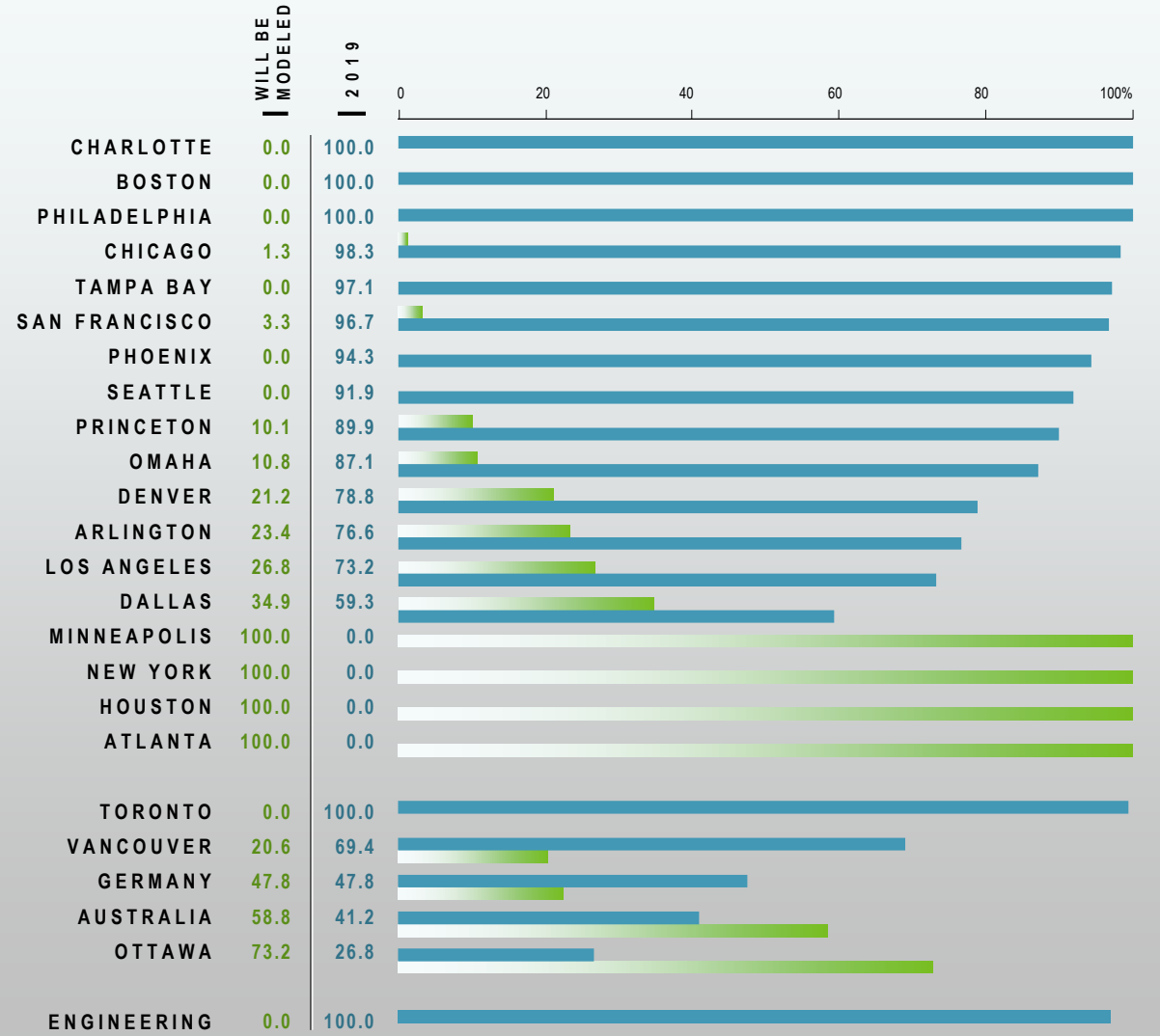
PREDICTED EUI REDUCTION BY OFFICE 2018-2019



HDR (GSF) ENERGY MODELING



ENERGY MODELING BY OFFICE 2019



PREDICTED EUI REDUCTION BY MARKET SECTOR

pEUI
Reduction

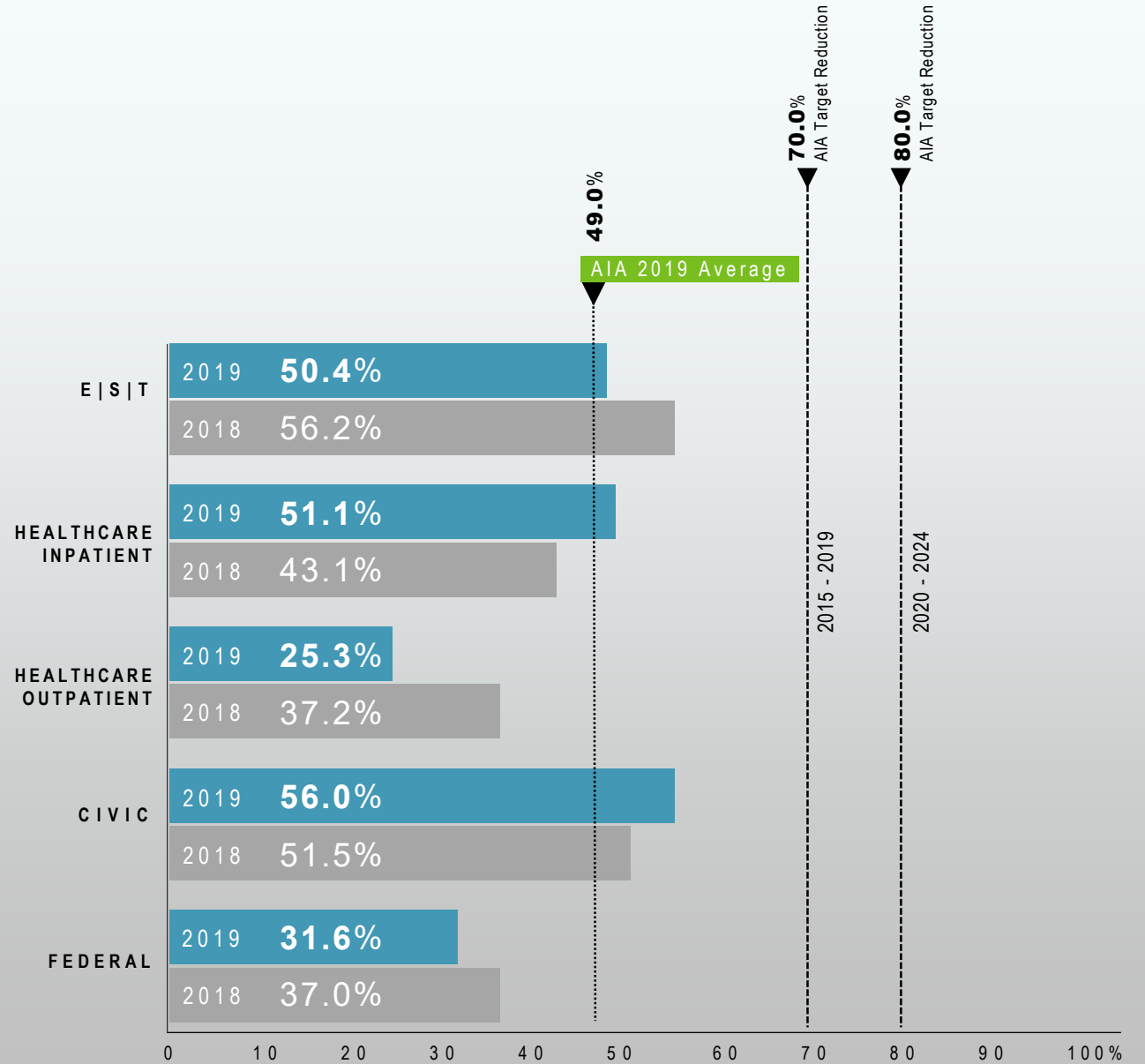
Energy
Modeling

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Reduction

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Overview by
Market Sector

Global
Overview



PREDICTED EUI REDUCTION BY LOCATION

pEUI
Reduction

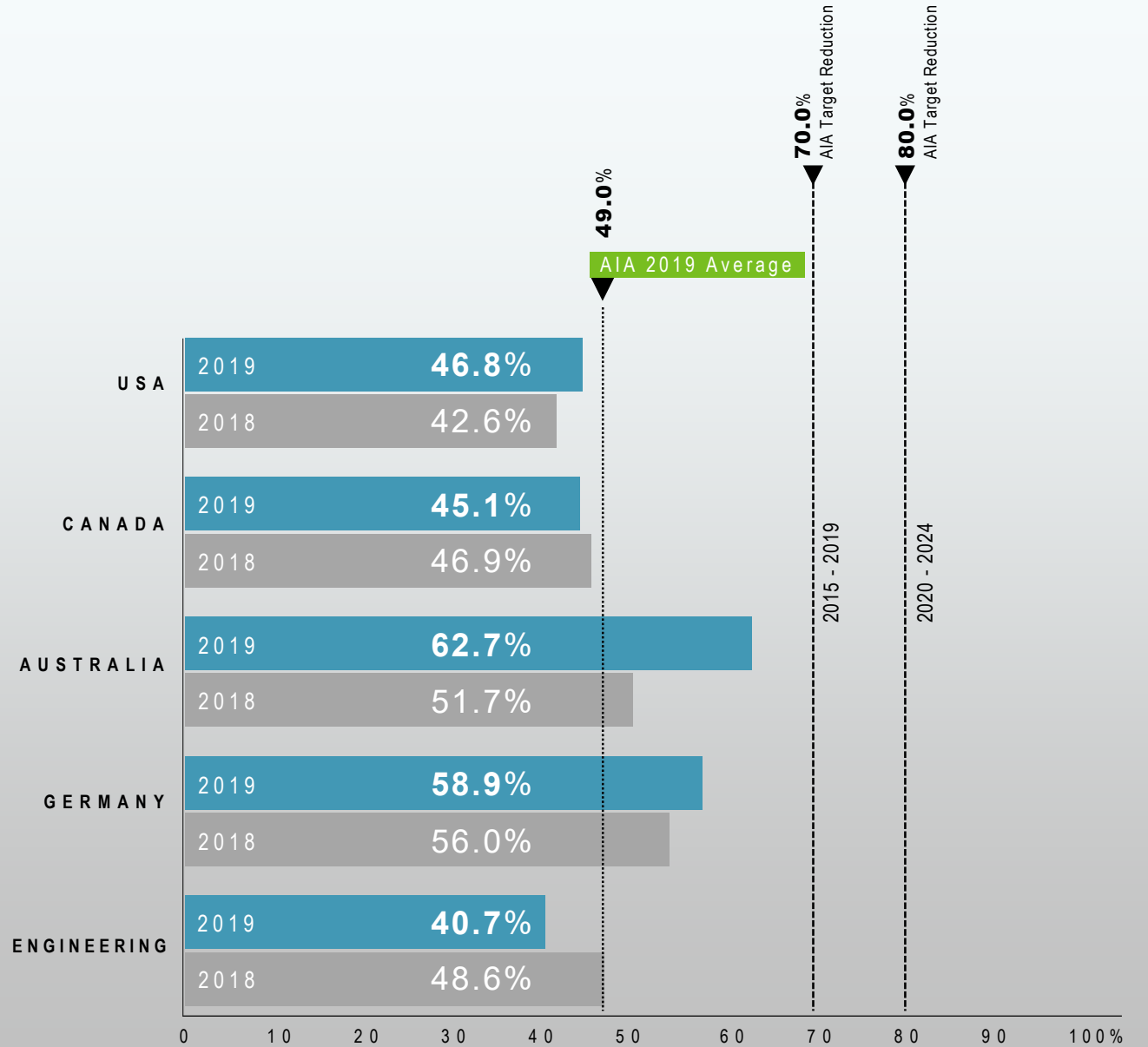
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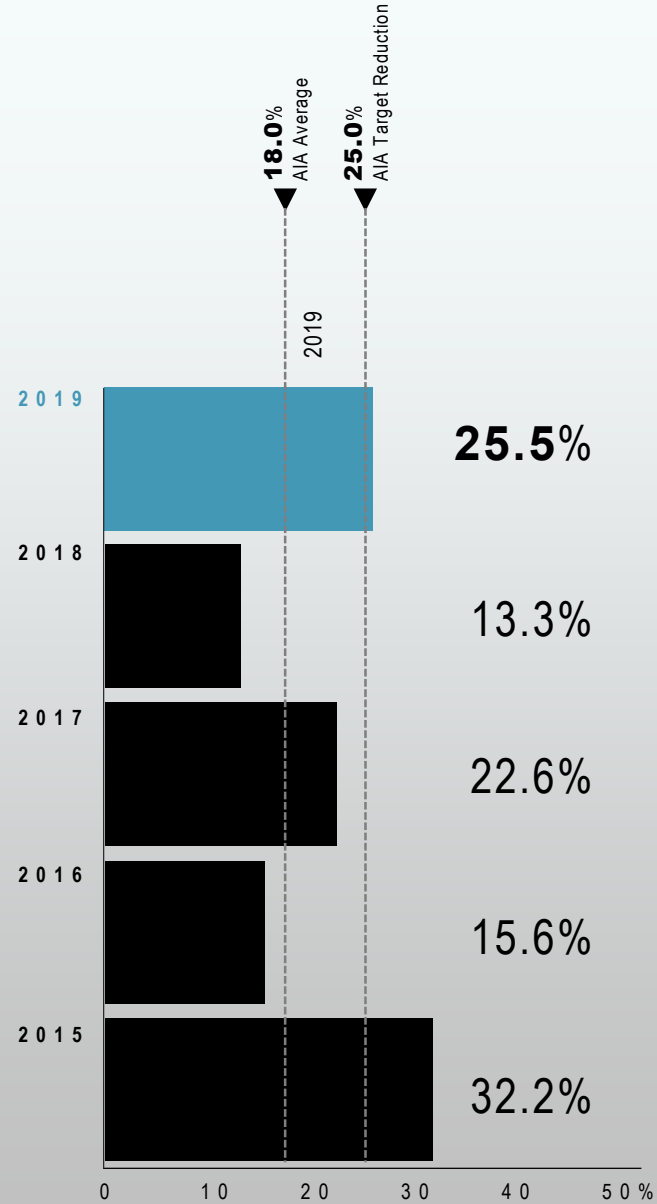
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Projects

Overview by
Market Sector

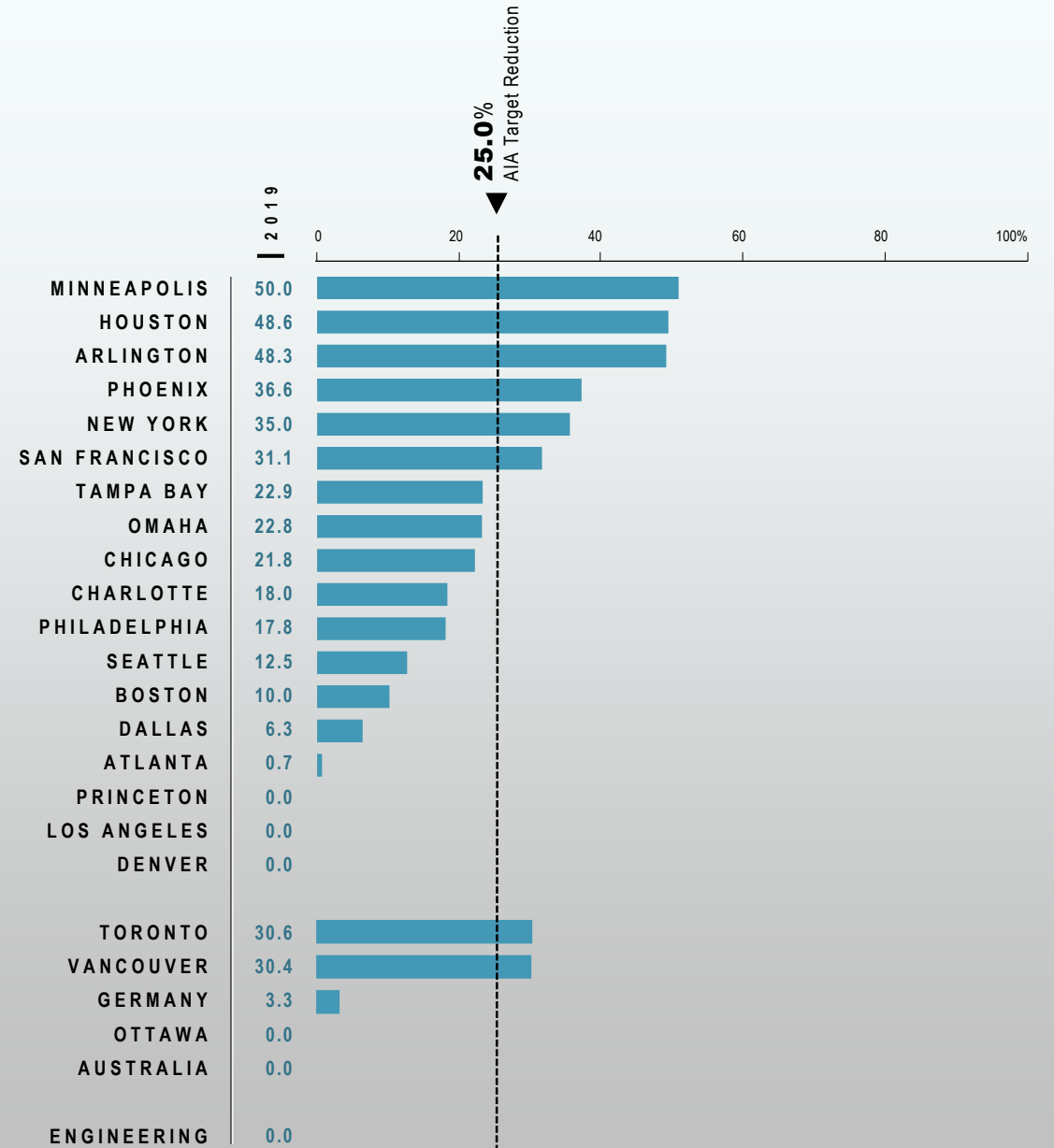
**Global
Overview**



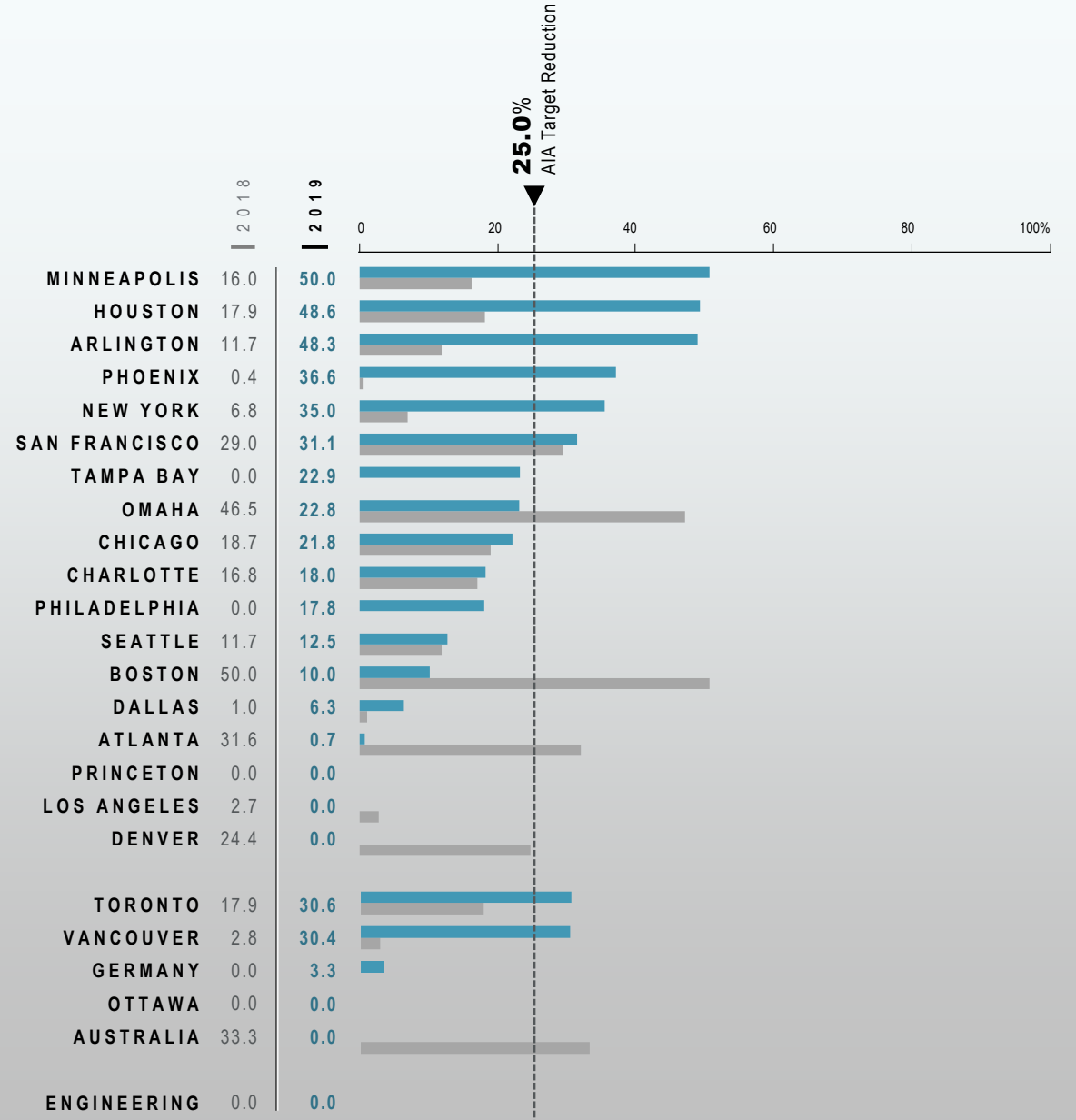
AVERAGE LIGHTING DENSITY REDUCTION

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Market SectorGlobal
Overview

LIGHTING DENSITY REDUCTION BY OFFICE 2019

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LIGHTING DENSITY REDUCTION BY OFFICE 2018-2019



TOP PROJECTS

| PROJECT | BUILDING TYPE | %pEUI REDUCTION | PREDICTED (EUI / LPD) |
|---|--|-----------------|-----------------------|
| LADWP West LA Power Yard | Service (vehicle repair/service, postal service) | 121.6 | -11.25 |
| LADWP Hoover Power Yard | Service (vehicle repair/service, postal service) | 106.1 | -3.05 |
| Orange County Sanitation District | Office - Medium (10,000 to 100,000 sf) | 101.8 | -1.65 |
| Westmead Hospital | Health Care - Hospital Inpatient | 90 | 22.7 |
| Ersatzneubau Munchen Klinik Harlaching | Health Care - Hospital Inpatient | 86.7 | 30.2 |
| Penn State Hershey | Health Care - Hospital Inpatient | 82.1 | 410 |
| Western Cancer Center Dubbo | Health Care - Hospital Inpatient | 81.2 | 42.6 |
| Dubbo Hospital Redevelopment | Health Care - Hospital Inpatient | 81 | 43.1 |
| P1395 MARINE RAIDER HQ | Office - Medium (10,000 to 100,000 sf) | 79.9 | 18.1 |
| Strukturprojekt Klinikum Chemnitz | Health Care - Hospital Inpatient | 79.5 | 46.6 |
| King County Park Maintenance Facility | Service (vehicle repair/service, postal service) | 78.2 | 16.8 |
| Singleton MTR | Other | 77.4 | 16.7 |
| Argonne Long Beamline | Laboratory | 77.4 | 43 |
| BC Housing Sooke | Residential - Multi-Family, 5 or more units | 74.1 | 20.7 |
| UKSH ÖPP Neubau ÜE 1 - LP2-4 | Health Care - Hospital Inpatient | 73.3 | 60.7 |
| UKSH ÖPP Neubau ÜE 1 - LP5 | Health Care - Hospital Inpatient | 73.3 | 60.7 |
| LBNL Welcome Center | Food Service - Restaurant/Cafeteria | 73.2 | 52.7 |
| Chemainus Library | Public Assembly - Library | 72.7 | 42 |
| Schuykill Yards - West Tower | Mixed-Use | 72.3 | 25 |
| Confidential Data Center | Data Center | 72.2 | 318 |
| RoyalBCMuseum - Research & Collections Building | Public Assembly - General | 70.1 | 46 |
| Douglas County Juvenile Justice Center | Courthouse | 70.1 | 29 |
| RC-VulcanPool | Public Assembly - Recreation | 69.9 | 40 |
| Tarrant Co Juvenile Center Ph2 | Courthouse | 69.5 | 36 |
| Denton Co: Charlie Cole | Courthouse | 69.5 | 36 |
| LADWP Western District Yard | Service (vehicle repair/service, postal service) | 68.5 | 17.3 |
| 1595 Bear Creek Residential Development | Residential - Multi-Family, 5 or more units | 67.5 | 26 |
| Sooke Library | Public Assembly - Library | 67.5 | 50 |

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