## CONTEXT: UCSD IS TRANSFORMING

### Square Footage

<table>
<thead>
<tr>
<th><strong>Today</strong></th>
<th><strong>2035-2036</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- 15.7M gross square feet (GSF) with another 3.3M GSF under construction or approved</td>
<td>- Adding an additional 8.5M-plus GSF to La Jolla campus</td>
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<td></td>
<td>- 26,000 residential beds</td>
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<td></td>
<td>- Redesigning Hillcrest downtown medical campus</td>
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### Population

<table>
<thead>
<tr>
<th><strong>Today</strong></th>
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<tbody>
<tr>
<td>- Over 39,000 students</td>
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<table>
<thead>
<tr>
<th><strong>2035-2036</strong></th>
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<tbody>
<tr>
<td>- 42,400 students</td>
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<tr>
<td>- 65,600 students, faculty and staff</td>
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BUSINESS AS USUAL REFERENCE CASE

Business-as-Usual Ref Case

History

Forecast

- Purchased Offsets
- Scope 1 Emissions
- Scope 2 Emissions
- Total GHG Emissions
- GHG Reduction Target

Year:
- 2007
- 2010
- 2015
- 2019
- 2025
- 2030
- 2035
- 2038

tCO₂e
- 0
- 50,000
- 100,000
- 150,000
- 200,000
- 250,000
EMISSIONS BY SCOPE & SOURCE

CY18 TOTAL EMISSIONS BY SOURCE

- Stationary Combustion: 61%
- Commuting: 23%
- Air Travel: 7%
- Purchased Electricity: 7%
- Refrigerants/Fugitive/Process: 0.6%
- Mobile Combustion: 1.4%

Greenhouse Gas Emissions by Scope

- Total Scope 1 (MTCO2e)
- Total Scope 2 (MTCO2e)
- Total Scope 3 (MTCO2e)
UCSD-UCSDH is ahead of the 2% reduction goal

Average Reduction Since 2011 = 2.8%
## CHALLENGES

<table>
<thead>
<tr>
<th>Campus transformation</th>
<th>Funding</th>
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<tbody>
<tr>
<td>• Adding over 8.5M GSF to main campus</td>
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<tr>
<td>• Hillcrest redesign</td>
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<tr>
<td>• Adding over 4,500 students (60% living on campus)</td>
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<td>• Thinking through best ways to fund all solutions</td>
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UPDATES TO THE CAP

• Adjusting energy efficiency spending

• Lowering space utilization improvement projection

• Focusing on three large scale scenarios, with financial comparisons based on high level modeling
SCENARIO 1: 100% OFFSETS FOR COGEN EMISSIONS
SCENARIO 2: 100% BIOGAS FOR COGEN
SCENARIO 3: DECOMMISSION COGEN

The chart illustrates the Portfolio 3 strategy for reducing CO2 emissions over time, with a focus on various emissions reduction targets and actions. The graph compares historical data from 2007 to the forecasted data up to 2038. Key emissions reduction strategies include:

- **High Performance New Buildings**
- **Improved Space Utilization, Existing Buildings**
- **Behavior and Institutional Change**
- **5-year energy efficiency plan**
- **Continue Operation of onsite PV**
- **Operate on-campus fuel cell**
- **New Onsite PV**
- **UCOP: Wholesale Power Program**
- **UCOP: Biomethane Existing Contracts**
- **UCOP: Biomethane New Contracts**
- **Fleet Conversion to 90% Alt. Fuel**
- **AB 32 Offsets**
- **Decommission Campus Cogen Plant**
- **Unspecified Offsets**
BIG IMPACT SOLUTIONS

- Offsets
- Directed biogas
- Select electrification & the UC WPP
- Sustainable Building Policy and Guidelines
QUESTIONS?
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