

Pathways to a Fossil Free UC Task Force

State-funded Decarbonization Study Scoping Guidance

Updated February 1, 2024, to clarify the intent of deliverables #4 and #5.

Updated May 19, 2023, to align with changes to the Climate Action section of the UC Policy on Sustainable Practices adopted May 5, 2023, by the UC Sustainability Steering Committee

General Scope

Campuses and health systems can use State decarbonization funds for any local priorities within the general scope of decarbonizing greenhouse gas (GHG) emissions from campus and health system energy systems. Energy efficiency, vehicle fleet, energy procurement, and all scope 3 emissions are outside of the scope of these State-funded studies. All campuses and health systems are required to provide the following five deliverables. Funds should be used to produce these deliverables if they cannot be provided through other means.

Deliverables

1. Produce a strategy for a 90 percent or greater reduction in scope 1 emissions from fossil gas use in campus energy systems from a 2019 baseline, which is defined to be full direct decarbonization for this study effort. The strategy will provide decision support for campus and health system leadership to commit to the earliest possible target date for full direct decarbonization, to be no later than 2045, and interim targets for the years 2030, 2035, and 2040 for the campus/health system central energy system, while maintaining resilience, electrical reliability, and regulatory compliance. Multiple scenarios (reflective of timing, fuel switching, etc.) are encouraged to provide richer decision support to leadership and to allow for flexibility.

Scenarios should include evaluation of what would be required to achieve electrification of main campus energy systems at the location. Additionally, scenarios may consider the role of biogas and/or green hydrogen for remaining systems that are not fully electrified. To align with proposed policy goals, the strategy must include interim scope 1 energy system greenhouse gas reduction targets for the years 2030, 2035, and 2040 if full direct decarbonization is not expected to be achieved before 2040.

2. Provide high level estimates of total capital and operational costs and savings, by phase if relevant, in sufficient detail to support funding requests to government and donors as well as inclusion in the campus or health system's capital financial plan. This cost-benefit analysis should include high level estimates of avoided maintenance, renewal, biogas, carbon offsets, water, and the social cost of carbon.
3. Identify climate justice and equity considerations related to the transition of campus/ health system energy systems to fossil fuel free and propose solutions or next steps to identify solutions. These considerations reference the [UC Framework for Incorporating Environmental and Climate Justice into Climate Action](#) and should:
 - a. Assess vulnerability of labor and surrounding community to transition to fossil free

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- b. Develop and evaluate equity indicators on transition impacts and opportunities
- c. Incorporate four major climate and environmental justice concepts:
 - i. Procedural: fairness of the decision-making process
 - ii. Recognition: respecting different values, cultures, opinions and structures within communities
 - iii. Distributive: just allocation of resources, benefits, and burdens
 - iv. Restorative: responsive to those impacted by the transition
- 4. Document knowledge gaps, and subsequent studies and analyses needed to conduct climate action planning that addresses the following.
 - a. Interim reduction targets for years 2030, 2035, and 2040, if full direct decarbonization is not expected to be achieved before 2040, covering all applicable scope 1, 2, and 3 emissions, as defined in the Climate Action section of the UC Policy on Sustainable Practices
 - b. All fossil fuel uses
 - c. A comprehensive institutional boundary
 - d. Climate and environmental justice
 - e. Equity-centered climate resilience (people, assets, and services)
 - f. Risk minimization (financial, operational, and reputational)

Note: This deliverable should list key components needed to conduct climate action planning. It is not intended to be a full Climate Action Plan.

- 5. Identify research, education, and other opportunities for collaborative involvement of students, faculty, and staff in campus fossil-free pathways that can contribute to UC's core mission of research, teaching, and public service. The focus is on applied learning and the campus as a "living laboratory" for climate action and sustainability.

If a location has already produced some of these deliverables they may use the State funding for other work in support of progress on the decarbonization pathway. For example, if a location has already developed detailed cost estimates in response to Deliverable #2, the location could focus on advancing planning and design activities in support of future university approvals. Otherwise, at least part of the State funding must be used to produce all five deliverables recommended by the Pathways to a Fossil Free UC Task Force and in support of UC's Sustainable Practices Policy.