Joint Sustainability Committee

RECOMMENDATION 20240228-XXX



Date: February 28, 2024

Subject: Joint Sustainability Committee Budget Recommendations (Low-Carbon Concrete)

Motioned By:

Seconded By:

Recommendation

Description of Recommendation to Council

Low carbon concrete: The City of Austin Climate Equity Plan Goal 3 says : "By 2030, reduce the embodied carbon footprint of building materials used in local construction by 40%.". Producing concrete emits CO2 through energy required to produce it as well as the chemical process, and procuring the concrete we need to grow represents a significant portion of Austin's footprint: 78,700 metric tons in 2023, and construction has the highest impact on carbon in terms of total city spend. Growing Austin while reducing our carbon footprint thus requires the use of low concrete concrete technology, but testing is required before scaling novel materials. **Thus, the JSC recommends that \$150,000 be allocated to the Office of the City Engineer division of Austin Transportation and Public Works Department for**

- 1. Field pour demonstrations using concrete containing a total cementitious content that is 50% or more decarbonized relative to a national ordinary portland cement average embodied carbon intensity of 922 kilograms per tonne of cement, and
- 2. An intern to assist the Department of Engineers to procure and implement the cement testing.

This work should be conducted in close coordination with the Office of Sustainability and Capital Delivery Services.