FAQs

1. Which projects should be included?

Include all design projects which meet the following criteria:

- Was in an active design phase during the report calendar year (Conceptual, Schematic, Design Development, Construction Documents or Construction Administration);
- Architectural projects with minimum scope including HVAC system modifications or substantial envelope modifications;
- OR interiors-only projects which included lighting design.

Projects which were not in a design phase during the calendar year should not be included.

We understand there will be some projects that are a bit ambiguous on whether they should be included. One way to consider what to track: “1. It could help clients save money by further integrating energy analysis and metrics into my practice” and “2. It will boost my firm’s profile by developing new sustainability approaches and creating a firm culture that exemplifies sustainable design”.

The 2030 Commitment is intended to be primarily an internal practice tool. We don’t suggest including projects just because the data looks good, in the same way we don’t recommend leaving it out because it is not meeting the goal. Just keep it honest.

2- Do I need to complete all of the fields?

No. Required fields have an asterisk. Learn more about required inputs here.

3- Should a project in conceptual or preliminary design stages be included?

Yes, as long as use type and gross square feet are established. If energy modeling is planned but has not yet produced a predicted energy use, an energy target may be used. Similarly for interiors projects, a LPD target may be used.

4- Should a project in construction be included?

A project currently under construction should only be included if it was in a design phase during the calendar year or if construction-phase modifications to envelope design or building systems were substantial enough to warrant a revised energy model or code compliance calculation.

5- Should a project which has been put on hold be included?

Yes, if the project and scope of work meet the description of a project which should be included. There is an option for selecting "on hold" as the project design phase.

6- How is the ‘Firm pEUI % reduction from average’ calculated?
For each project that is not interior-only, % pEUI reduction from average is multiplied by the project’s GSF. The sum of these products is divided by the sum of GSF of the same projects to yield a weighted average % reduction from average. This number represents the firm’s progress toward the 2030 goals.

7- Why is reporting based on site EUI and not source EUI?

Source energy reflects the energy used not only at the building but also used in electricity generation, transmission, storage, etc. While this is an important measure of embodied energy and an important part of calculating a carbon footprint, the focus of this reporting is to analyze the energy performance of our work. Additionally, site energy is often the unit most relevant to our clients, as this is what is represented on their utility bills.

8- Can the purchase of Renewable Energy Certificates (RECs) or other renewable energy credits be considered in a project’s calculation of EUI?

No. At this point the project EUI only includes onsite renewables. Offsite renewables or RECs are not included in this analysis.

9- Can on-site generated renewable energy contribute to a project’s calculation of EUI?

Yes, provided that the power produced (or the environmental attributes of the power produced) are used on-site. Once a pEUI for the project is determined, subtract the predicted energy production per square foot to arrive at a final pEUI which accounts for on-site renewables.

10- What are best practices in setting the baseline EUI?

See further information in the baselines section for step by step guidance.

11- Why is LPD used as the main criteria for interiors projects?

Generally, the ability of an interior design project to affect building EUI is mostly limited to lighting design. Since interiors-only projects tend to not include HVAC system or envelope modifications, lighting power density is the criterion most applicable to interiors work. Please note that while Lighting Use Intensity (LUI) is a more meaningful prediction of how lighting contributes to overall energy use in a building, LUI can only be derived from energy modeling, which is seldom employed for interiors-only projects.

12- Why is the LPD reduction goal 25% from ASHRAE 90.1 2007?

This is a challenging target, yet achievable with today’s technology. This reduction earns 3 of 5 relevant points for a LEED-CI 2009 project, and it is a common threshold for commercial lighting tax deductions and financial incentives.

13- What if LPD was not calculated on a project?

Only interiors projects which include lighting design should be included in 2030 reporting. If LPD has not yet been calculated because it is early in the project’s schedule, an LPD target may be used. If LPD is left blank, a 0% reduction is assumed.

14- How does the design energy code relate to the target LPD?

See further information in the LPD inputs section. Comprehensive information about LPD design energy code equivalents is not currently available. We do provide a reference table for a sense of the likely range the project should be situated based on the design energy code. Keep in mind the baseline for the 2030 Commitment for LPD is ASHRAE 90.1 2007.

15- How should attached structured parking be represented?

If a project which includes parking within the building has been modeled and can be analyzed in Target Finder, use Target Finder, entering parking as a secondary space type to arrive at a comparable average EUI. If the project has not been modeled or cannot be analyzed in Target Finder, exclude the parking area from the total GSF.
16- What is Title 24 (T24) Time Dependant Valuation EUI (TDV EUI)?

What is Time Dependent Valuation?

Time Dependent Valuation (TDV) is a metric used in California’s Title 24 Building Energy Code, meant to incorporate the societal and environmental impacts into the cost of energy during a given hour of the year. TDV includes higher greenhouse gas emission rates and actual cost of electricity from peaker plants—power plants that generally run only when there is a high demand—during high energy demands on the hottest days of the year.

Can I report TDV to the 2030 Commitment?

The 2030 Commitment uses EUI and Lighting Power Density (LPD) as primary metrics for all projects. The cover sheet of a typical Title 24 compliance report shows TDV EUI values with units of kbtu/sf-yr. However, these metrics represent an annual site energy use value that, for each hour of energy consumed, have a time-of-use multiplier applied. While these TDV EUI values appear to be Site EUI figures due to their units, they are not in fact showing Site EUI, the correct metric to track and report for 2030. Although T24 doesn’t emphasize Site EUI on the cover page, you may still be able to calculate the Site EUI for non-residential projects from T24 documentation (see below).

Additionally, there are some software like EnergyPro that MEP engineers use to extract the site EUI from TDV EUI with minimal effort. In either case, it is critical that you talk to your MEP at the beginning of the project and let them know that you are a 2030 Commitment signatory and you expect to receive the Site EUI in addition to the Title 24 documentation.

How to calculate your non-residential building Site EUI using the energy code forms.

To calculate pEUI from T24 PRF-01 (Table U of NRCC PRF-01 page 21), follow steps below:

1. Find Table U – Energy Use Summary. This is usually found somewhere in the middle of the T24 PRF-1 forms.
2. Take either value in the green boxes and convert it to kBtus.
   a. In order to convert MWh to kWh, multiply by 1000. To convert kWh to kBtu, multiply by 3.412.
   b. In order to convert MBtu to kBtu, multiply by 1000.
3. To calculate the pEUI, divide the converted value from either green box then divide it by the building area. See formula below:

   a. pEUI= Annual Energy Consumption (KBTU)/GSF

4. Some projects will have Proposed Design Site energy values in Therms (if the project uses natural gas) in addition to the Proposed Design Site energy values in MWh or kWh. In this case, the Proposed Design Site energy in Therms will need to be converted to kBtus then summed with the Proposed Design Site in MWh/kWh (after the conversion to kBtus).
   a. In order to convert Therms to kBtus, multiply by 100.

5. If your project has on-site energy, subtract the on-site energy value from the total Proposed Design Site energy before calculating the pEUI in step (3).