## **ZERO-OVER-TIME (ZOT)**



# WHAT IS A ZOT PLAN AND HOW DOES IT WORK?

By creating a Zero-Over-Time (ZOT) plan, building owners set a clear plan to reduce their building's greenhouse gas emissions over time, comply with BERDO, and reach net-zero emissions by 2050. Developing a ZOT plan encourages you to think about your budget, the building's energy use, its condition, and the age of equipment, while making improvements over time to lower energy use, add renewable energy, and replace old equipment with more efficient options over time.

## A ZOT PLAN IS A GRADUAL APPROACH OVER TIME TO NET ZERO EMISSIONS. IT HAS THREE MAIN GOALS:



#### **UNDERSTAND YOUR BUILDING'S EMISSIONS**

Schedule an energy audit to assess your building and find areas for improvement. Use past utility data to set a baseline and estimate energy and emissions savings. Check if you may need flexibility measures under BERDO.



#### ADD RENEWABLE ENERGY

If needed to reduce electricity emissions, plan to install solar panels on-site or purchase renewable energy. You can do this by enrolling in BCCE's Green 100 plan, buying Renewable Energy Certificates, or signing a Power Purchase Agreement.



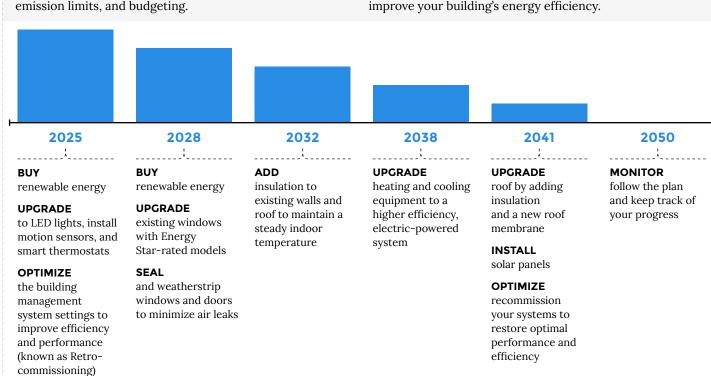
#### LOWER BUILDING EMISSIONS OVER TIME

Plan to upgrade building energy systems (HVAC, lighting, controls), replace appliances, and improve the building envelope (walls, roof, windows, doors) when needed to prevent air leaks and save energy.

### YOU CAN THINK OF A ZOT PLAN AS A SERIES OF PROJECTS DONE IN STEPS, HERE'S AN EXAMPLE:

You'll likely work with <u>building science professionals</u> to consider things like equipment conditions, BERDO's emission limits, and budgeting.

Start by setting your starting point and having clear goals. The blue bars show how emissions reduce over time as you improve your building's energy efficiency.



WHAT ARE COMMON STEPS IN ZOT PLANNING? While ZOT plans will be different for each building, the steps you take to develop your plan will be similar. Here are some general steps you can take to develop a ZOT plan: LOOK AT YOUR EMISSIONS ENGAGE STAKEHOLDERS STEP 1 Use the BERDO Emissions Calculator · Discuss the plan with your tenants, investors, executives, etc. to understand your building's energy **SET YOUR STARTING** use and identify emissions reductions Engage building science needed to comply with BERDO. POINT AND HAVE professionals if needed. **CLEAR GOALS** COMPLETE AN ENERGY AUDIT EXPLORE ALL PATHS Schedule an energy audit to have Consider all BERDO Compliance an energy professional look at your options, including making Alternative building's systems and condition. Compliance Payments and/or Get started with Mass Save. applying for a Flexibility Measure. CREATE YOUR OWN PLAN 7 IMPROVE ENERGY EFFICIENCY PLAN LONG-TERM UPGRADES STEP 2 Look for ways to save energy in Plan for bigger energy saving the near term. For example, add upgrades to your building envelope, **IDENTIFY ENERGY** insulation, upgrade lighting and HVAC system, water boiler, and appliances, optimize building **IMPROVEMENTS** appliances when they are due for controls, upgrade windows, seal and replacement. weatherize etc. BUILDING DECARBONIZATION QUICK GUIDE 7 TAKE A CLOSER LOOK AT BUILDING RETROFITS 7 ☐ CHECK YOUR ENERGY NEEDS CHOOSE RENEWABLE OPTIONS STEP 3 The amount of renewable energy Evaluate costs, and terms of different you need to buy will depend on your options. Some may be better fits for **EXPLORE RENEWABLE** building's electricity use and your your needs than others. BERDO emissions limit. **ENERGY OPTIONS** LEARN MORE ABOUT RENEWABLE ENERGY OPTIONS UNDER BERDO 7



STEP 4

FOLLOW THE PLAN AND KEEP TRACK OF YOUR PROGRESS ☐ TRACK PROGRESS

Compare your energy and emissions to your BERDO emissions limits.

■ ADJUST PLAN ACCORDINGLY

Make sure you're following your plan and adjusting it when needed.

LEARN MORE ABOUT WHO CAN HELP YOU WITH YOUR BUILDING DECARBONIZATION EFFORTS 

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**About BERDO:** boston.gov/berdo

**Pathways for Emissions Reductions:** 

boston.gov/retrofit-hub

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