

Planning Methodology



Survey

AHA will visit your site(s) and work with you to determine your current compliance status



Assess

AHA will study the data, along with your site specific utility constraints to determine appropriate solutions.



Strategize

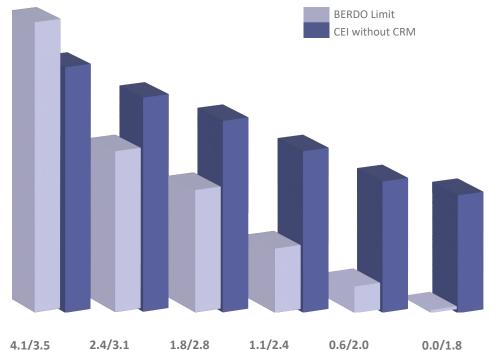
AHA will guide you in determining the most impactful Carbon **Reduction Measures** (CRM), while considering the technical, regulatory and financial implications.



AHA is able to provide guidance based on our unique expertise on your implementation journey, as a trusted advisor and partner.



Building Case Study: No Carbon Reduction Measures



All Carbon amounts are kgCO2/SF/yr. The above is based on a 200,000 SF building completed in 2022.

2040-2044

2045-2049

2050-2054

2035-2039

2025-2029

2030-2034

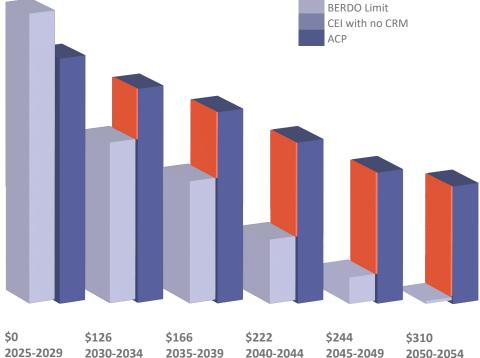
This chart outlines the difference in carbon emissions intensity (CEI) relying only on the planned "greening" of the electric grid itself versus the BERDO limits. This will result in:

13,800,000 kgCO2 OVER **BERDO Limit**

The City of Boston BERDO regulations set strict limits on the amount of carbon emissions a building can emit. For every day over the BERDO limit, the building owner will be penalized.



Building Case Study: No Carbon Reduction Measures



All Carbon amounts are kgCO2/SF/yr, all dollar amounts are thousands. The

above is based on a 200,000 SF building completed in 2022.

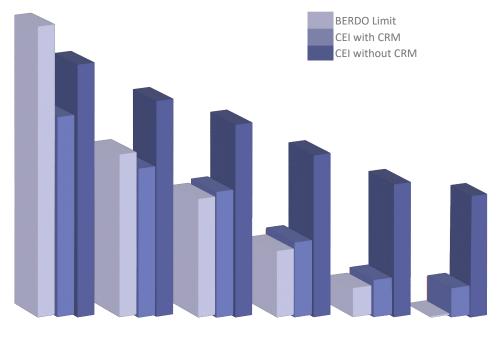
This chart outlines the total Alternative Compliance Payments (ACP) required to avoid the BERDO penalties in being 13,800,000 kgCO2 over BERDO relying only on the planned "greening" of the electric grid. This will result in:

\$1,068,000 of **ACP** to avoid BERDO **Penalties**

The City of Boston BERDO regulations set strict limits on the amount of carbon emissions a building can emit. For every day over the BERDO limit, the building owner will be penalized \$1.000.00!



Building Case Study: With Carbon Reduction Measures



4.1/2.8/3.5 2025-2029

2.4/2.2/3.1 2030-2034

1.8/1.9/2.8 2035-2039

1.1/1.2/2.4 2040-2044

0.6/0.7/2.0 2045-2049

0.0/0.6/1.8 2050-2054

All Carbon amounts are kgCO2/SF/vr. The above is based on a 200,000 SF building completed in 2022.

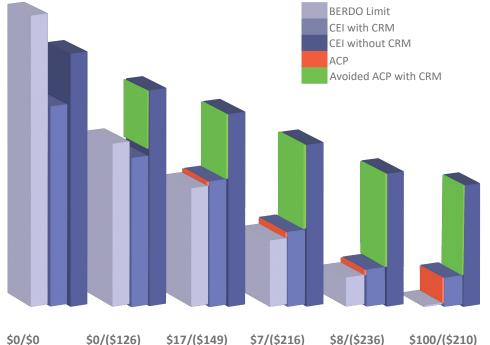
This chart outlines curtailing carbon emissions through undertaking Carbon Reduction Measures - installing PV, heat pumps, sealing building envelopes, purchasing offsite renewables - in comparison to BERDO limits and no CRM undertaken. This will result in:

85,800 kgCO2 **OVER** BERDO Limit (reduced from 13,847,000)

The City of Boston BERDO regulations set strict limits on the amount of carbon emissions a building can emit. For every day over the BERDO limit, the building owner will be penalized.



Building Case Study: With Carbon Reduction Measures



All Carbon amounts are kgCO2/SF/yr. The above is based on a 200,000 SF building completed in 2022.

2040-2044

2045-2049

2050-2054

2035-2039

2025-2029

2030-2034

This chart outlines mitigating ACP from undertaking Carbon Reduction Measures. Allowing owners to reduce emissions thereby avoiding penalties and minimizing ACP. This will result in:

\$133,000 in **ACP** to avoid BERDO Penalties (reduced from \$1,068,000)

The City of Boston BERDO regulations set strict limits on the amount of carbon emissions a building can emit. For every day over the BERDO limit, the building owner will be penalized \$1.000.00!

How AHA Can Help

By ACTING NOW, you can avoid Penalties and minimize Alternative Compliance Payments.

The Path To Net Zero Carbon can be complex and technically challenging. Each property is different and requires a unique approach.

AHA has a team of "Carbon Emission Intensity" Planning professionals, with a suite of tools, to help streamline your compliance efforts. We work closely with you to develop a plan tailored to your property.

TOGETHER we will develop appropriate solutions that meet your short and long term goals.



Contact

David Ellowitz
PE, LEED AP
Partner | Project Executive
david ellowitz@aha-engineers.com





Adam Jennings
PE, CEM, LEED AP, WELL AP, CBCP
Partner | Director of Energy & Sustainability
adam jennings@aha-engineers.com