

# Report No. PW 2021-11

## Attachment 2

### Long Term Renewable Energy Plan Project Evaluation Criteria Weighting References

Criteria	Annual Change in Electricity Consumption (%)	Annual Change in Natural Gas Consumption (%)	Renewable as Portion of Building Consumption (%)	GHG Reductions (tCO2e/yr)	Estimated Capital Costs	Net Change in Annual Utility Costs	Costs/GHG (\$/tCO2e)
<b>Strategic Reference</b>							
100% RE Plan	2.1.3 - Targets - ""Fuel switch from natural gas to electricity for space heating in residential and non-residential sector". 2.1.3 - Targets - "Increase energy conservation in residential, non-residential and transportation sectors."	2.1.3 - Targets - ""Fuel switch from natural gas to electricity for space heating in residential and non-residential sector". 2.1.3 - Targets - "Increase energy conservation in residential, non-residential and transportation sectors." "Oxford does not intend to decouple from any existing energy networks [but will] improve the utilization of these networks through the advancement of a bi-directional flow of energy."	2.1.3 - Targets - "Increase the renewable generation capacity [by 2050]." "The goal will be fully achieved when the annual renewable energy generated equals 100% of the annual energy consumed within Oxford." • "To reach the goal of 100%, Oxford will need to switch space heating from natural gas (non-renewable) to electric heating (renewable)... Oxford will target to generate 71% of its energy needs from renewable energy sources. Chapter 4 – Promote Energy Conservation and Efficiency Key Points: - Retrofit existing built-environments; Upgrade infrastructure and support new technologies; Energy efficiency gains will reduce the amount of renewable energy required to meet the same needs; Effective energy efficiency planning must align with renewable energy needs assessment	"The road to 100% RE will reduce CO2 emissions by 47% for Oxford County." (397,942 by 2050) "By 2050, [the CO2 emissions emitted from the residential sector] is set to decrease to 105,965 tonnes, a decrease of 50%. 65% of this will come from the transition from natural gas to electricity, and a 35% increase in energy conservation"	"Although major investments in	2.1.3 - Targets - High-performance building portfolio "illustrate[s] adoption of high-performance buildings will enable cost effectiveness of renewable energy and energy storage." "Based on the existing energy infrastructure, we have become resigned to the fact that our after-tax energy dollars must be sent outside of the County. Virtually all money paid for energy use is sent outside... to distant generators. This does not need to be the case and other jurisdictions... are gradually reversing this flow back to their communities, where it is re-invested within the community to further advance renewable energy development."	
Energy Management Plan	10% overall reduction in County electricity by 2019		Increase number of sub-metered buildings to 10 by 2024 Target of 9.2% renewable energy mix by Dec. 31, 2023	10% reduction in carbon emissions by 2019 To meet the 100% RE by 2050 target, there needs to be a 69% reduction in greenhouse gas emissions. 9.7% reduction in GHG emissions from 2015 by Dec. 31, 2023	"As of 2019, Oxford County has \$150,000 annually dedicated to green initiatives through 2024. In order to meet the requirements within this plan, Oxford County will require a spending increase of \$976,600 over the five year period."		
Future Oxford Community Sustainability Plan			Action #51 - Develop a plan to ensure Oxford achieves 100% Renewable Energy by 2050.	Action #50 - Develop a plan to ensure Oxford is carbon-positive by 2050. Action #54 - Advocate for Building Code revisions to reduce fossil fuel consumptions through green construction and retrofits.			
Strategic Plan				3.iii. - A County that thinks ahead and wisely shapes the future – A demonstrated commitment to sustainability			
Weighting	4	6	5	7	2	3	1