Facilitators' Notes for Module 1 – Climate Change, Trends and Projections (1 ½ hours)

Objectives:
1. Review the main features of climate change and how it is expected to manifest in Ontario
2. Understand the main features of global and downscaled climate models, and how to get information about local climate trends and projections
3. Review and discuss climate trends and projections for a city in the region.

Description	Expected Time
Q & A – Climate Change Knowledge of Participants Ask participant how many have worked on climate change mitigation programs within their municipality. Ask also for them to indicate on a scale of 1 to 3 (least to most) how knowledgeable they consider themselves to be about climate change and its likely impacts: 1 – Basic knowledge 2 – Moderately knowledgeable 3 – Quite knowledgeable Note on a flip chart how many of the participants placed themselves in each category. Invite knowledgeable participants to comment on information that is being covered in the Powerpoint.	5 minutes
Presentation and Discussion – Climate Change, Trends and Projections Use a Powerpoint presentation to review the following topics : ▪ **The main features of climate change** ▪ **Recent climate trends in Canada and Ontario** ▪ **How global climate models are constructed** ▪ **What climate models tell us about the future** ▪ **Where to get climate information that is relevant to your community**	25 minutes
Coffee Break	10 minutes

Small Group Discussion – Local Climate Trends and Projections
 	
Organize the participants in groups of 4-5, and have them review the graphs and charts in Appendix B and answer the following questions:
 	
Climate Trends – Historical Climate Analysis Table (Appendix B-4)
 	
    1. Which historical climate trends do you see that are statistically significant?
    2. Which trends seem to you to be interesting, or of concern, even if not statistically significant?
    3. Which climate parameters do not seem to be changing that you might have expected to change?
    4. Which trends concern you most?
 	
Climate Trends – Graphs (Appendix B-5 to B-10)
 	
(Note: These charts were done for just some of the climate trends.)
 	
    1. What is the variability in total annual precipitation for Windsor (page B-5)?
    2. How does this variability compare to spring total precipitation (B-7)?
    3. What might this mean for the City of Windsor?
    4. What trend do you see in annual total snowfall for Windsor (B-8)? Anything surprising?
    5. What trend do you see in freeze-thaw cycles (B-9)?
    6. Are there other climate trends in the table on B-4 that would you like to see graphed this way? Which ones?
 	
Climate Projections – Scatterplots
 	
    1. Looking at the scatterplots for annual and seasonal rates of climate change for Windsor (B-10 to B-14), what do the projections tell you?
    2. How might you use this information?
 	
Climate Projections – Histograms
 	
    1. What does the histogram for the projected precipitation distribution tell you?
    2. How do the projected annual temperature and annual precipitation compare?
 	
General
 	
    1. Could you or would you use these tables or charts in communicating about climate change to others in your municipality?
 	
Ask participants to reconvene and report back. Group 1 can report on the Climate Trends table, Group 2 on Climate Trends graphs, and Group 3 on the Scatterplots and Histograms. Though only one group is reporting back on a set of questions, each group should be invited to comment or add information that they considered in answering the same questions.
	50 minutes