

## EXECUTIVE SUMMARY

As concern over climate change increases and communities become more involved in meeting greenhouse gas emission reduction targets, the ways in which energy is generated, supplied and distributed are shifting from centralized to localized solutions. As such, community energy plans (CEPs) are becoming a more common means of evaluating and managing energy supply and demand for cities. Despite the increasing prevalence of CEPs, the ways in which professional planners are included in the creation and implementation of these plans has not been fully explored. There is little supporting research in Canada relating the role of land use planning in energy planning, and no academic research regarding the role planners play in the CEP process. Energy demand and supply is a topic intricately entwined with land use, transportation and infrastructure planning. This study's aim is to explore the notable role of planners when creating and implementing CEPs, and to inform the planning profession about the best ways to be included in the process of developing these plans. This Master's report analyzes CEPs in two Ontario communities through the lens of a planner, to investigate the role of professional planners in developing these plans. This study will identify the key elements of CEPs, as related to the planner's role, with the following specific objectives:

- Identifying the role of the planner in creating the CEP
- Recognizing how land use planning terms and concepts, such as land use, neighbourhoods, transportation and buildings, are incorporated into the documents
- Highlighting how planners are contributing to plan implementation
- Exploring opportunities and limitations to integrate energy considerations into the practice of professional planners

Using a comparative case study approach, this report consists of a literature review, CEP document analysis and interviews with municipal planners and project leads associated with the case study's CEPs. The case studies include two large cities with CEPs in place that emphasize land use as a determinate of energy usage, London and Windsor, Ontario. CEPs provide an opportunity to incorporate energy planning into the municipal decision-making process to build more efficient, and more sustainable communities. This study is meant to inspire the planning profession to expand its role further into energy planning and to better understand how planners are to work with an increasingly popular, comprehensive form of energy planning.

The case study findings establish that the notable role of planners is to provide technical and policy support for CEPs. In both case studies, there are many other less pronounced roles of education and advocacy, however, that can be encouraged through a planner's ability and willingness to become

better informed of energy planning in general. The case studies found that, despite contrasting approaches to the CEP, there is strong emphasis on land use planning as part of a CEP's foundation and planning concepts and terms are integrated throughout the documents. Planners provide policy support and data to support the development of the CEP. Further policy support is also required for key strategies to be implemented. A broadened, formalized role beyond Official Plan policy integration would allow CEPs strategies to be part decision making processes for land use, infrastructure and transportation planning, from the site to the community level. As differing perspectives on how and how much a planner should be involved in the implementation process of CEPs was found, recommendations to strengthen the role of planners in CEPs are included for municipal, regional, provincial and federal government planners, professional planning associations and Professional Standards Board-accredited Universities.