

CITIES OF OIL

Municipalities and Petroleum Manufacturing
in Southern Ontario, 1860–1960

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*Municipalities and Petroleum
Manufacturing in Southern Ontario,
1860–1960*

TIMOTHY W. COBBAN

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1 Introduction

This book is a study of the influence of municipalities on the location and development of the petroleum manufacturing industry in southern Ontario during the period 1860–1960. It is, therefore, very much a study of the deep past, an account of an important industry in early Canadian history that has not yet received the sustained analysis that its significance warrants, and of the places in which it came to be centred, their people, and their local governments, the last of these also constituting a significant gap in historical research. But the objectives of this study are squarely rooted in the present. It is about the role of municipalities in stimulating economic growth.

The petroleum manufacturing industry in Canada developed in the mid-eighteenth century, following the discovery of crude oil deposits in the extreme southwestern tip of the Ontario peninsula. It soon developed into one of early Canada's largest manufacturing industries, and crude oil became, for a time, its most valuable mineral product. Initially, petroleum manufacturing consisted of simple distillation in a small cast-iron still, which was mostly done over an open fire at the well head. As petroleum came to supplant coal-oil as the main feedstock for producing lamp oil, the industry greatly expanded, and petroleum refiners were drawn to the urban centres of southern Ontario, where manufacturing inputs were more readily available and where transportation networks could be more easily accessed. By the early 1860s, petroleum refining had begun to centre on the eastern outskirts of London, in a place that came to be named London East, which afforded all of the advantages of locating in one of southern Ontario's larger urban centres and was the point closest to the crude oil producing region along the industry's main transportation route that

possessed competitive railway shipping. There, in London East, petroleum manufacturers made significant breakthroughs in improving the technology of petroleum refining – through the discovery of a new process that helped mask the offensive characteristics of sulphur-rich southern Ontario crude oil – and in organizing the industry's production, through the formation of Imperial Oil Limited, an early form of the modern industrial enterprise in Canada.

The industry remained concentrated in London East until the early 1880s, when, following the formation of Imperial Oil, it shifted to Petrolia, a village in the centre of the crude oil producing region, after the village had acquired competitive railway shipping of its own. When Imperial Oil was acquired by Standard Oil at the end of the nineteenth century, the industry shifted again, this time to Sarnia, where the St. Clair River allowed for the bulk imports of US crude oil by tanker vessel. The Canadian petroleum manufacturing industry remained in Sarnia through the first half of the twentieth century, expanding greatly in the interwar years as production shifted to gasoline and again during and shortly after the Second World War through the development there of a world-class petrochemical manufacturing sector.

The story of the Canadian petroleum manufacturing industry can be told from a variety of perspectives. And, at least in part, it already has been. Others have examined key periods in the industry's development from traditional perspectives in Canadian historiography, explaining, for example, how protectionist federal policies stimulated the industry's early growth by sheltering it from international competition, how entrepreneurs both shaped the industry's organization and drove technological change behind those protectionist walls, and how foreign capital and ownership came to greatly influence the industry's structure and scale. Their work greatly informs this study, as the attributions in the following chapters make clear. And indeed, one of the main objectives here is to combine these studies with fresh evidence to produce a more complete – and more accurate – account of the industry's development and the factors which ultimately shaped it. But this study departs from previous efforts, and from traditional approaches to studying the political economy of industrial development in Canada more generally, by examining the petroleum industry's growth from a decidedly local perspective. The emphasis here is on the role of municipal government in the industry's development. From this view, three themes are important.

The first concerns the factors influencing the development, growth, and location of industry. In modern terminology, the concentrations of petroleum manufacturing in London East, Petrolia, and Sarnia would be referred to as *industrial clusters*. Although exact usage varies, the term *industrial clusters* is usually held to mean a disproportionately large and particularly dense local or regional concentration of firms within one industry or a set of closely related industries.¹ Industrial clusters have received much recent attention from analysts and policy-makers seeking to understand the locational decisions of firms and the dynamics of urban economic growth.² Theories of industrial clustering abound, but most emphasize the importance of the external benefits firms generate for other local firms within their industry. These benefits are usually termed “localization economies,” of which three are held to be particularly important: local labour markets, demand and supply linkages, and information and knowledge sharing. As a local industry sector grows, a market of suitably skilled labour begins to pool, which attracts not only new investment but also more skilled workers who seek the robust benefits and diverse opportunities such markets afford them. Industry growth also works to draw in specialized supply and service industries, as well as those that purchase the sector’s outputs, and this vertical industry expansion can induce more new investment within the sector. Across local industry sectors, ideas and information can be shared rapidly, sometimes uncontrollably, and this dissemination of knowledge enhances labour productivity and so attracts both new investment and more workers. Once a local industry sector reaches some point of critical mass, these external benefits of agglomeration, these localization economies, begin to materialize, and the growth of the sector can become endogenously reproduced.³

The importance of localization economies in explaining industrial cluster formation and growth suggests a role for public policy in stimulating cluster development. Timely, responsive, and strategic government policies and interventions are emphasized, particularly during the early stages of cluster growth.⁴ Because such policies should take into account the dynamics and particular needs of industry sectors and because those are likely to vary by location, cluster policy is ideally devised and executed on a correspondingly local scale. Municipal governments, then, constitute a level of government uniquely positioned to develop and implement clustering policies, if only because the main

institutional alternative – decentralized regional agencies of the provincial or federal government – would require territories highly similar to those of municipalities. Here, the role of municipal governments in stimulating the rise of the petroleum manufacturing clusters in London East, Petrolia, and Sarnia is explored.

It might be tempting to assume that a cluster-based approach might not yield much insight into the development of the early Canadian petroleum manufacturing industry. After all, the industrial geography of such secondary processing industries is ultimately anchored by the sites of resource extraction. The location of manufacturing facilities, then, becomes largely a function of minimizing the relevant costs of shipping raw materials, supplies, and other manufacturing inputs to the plant and distributing intermediate and finished goods to purchasers and markets. The size and structure of the local industry are largely determined by economies of scale and scope that are internal to firms. Externalities explain little.

Such a view would be mistaken. It does not accord, in the first instance, with the much more extensively documented history of the early US petroleum manufacturing industry, which emerged and developed alongside its Canadian counterpart – in stride, for a short time, but then with increasing dominance. There, in the industry's initial decades, refineries were widely dispersed, with some clustering near the sites of oil production in Pennsylvania but with others scattered among several cities – namely, Pittsburgh, New York, New Jersey, and Cleveland – where skilled labour, supplies, and services were more abundant and where markets were more easily accessed. As the definitive account of the industry during this period states, "There was no dominant combination of forces dictating refinery location at any particular area."⁵ Relevant transportation costs fluctuated greatly – as new oil wells were drilled and old ones ran dry, as new markets emerged and old ones faded, as refining efficiency improved and new shipping methods were deployed – and were themselves subject to change, through investments to new railways and pipelines and through strategic manipulation by leading firms. Timely access to information was always crucial, but the type of information varied depending on prevailing market conditions and the degree of organization among crude oil producers and petroleum refining. Gradually, Cleveland emerged as the dominant centre of refining, led by Standard Oil, even though it held no natural locational advantages over the other cities. Understanding the locational

geography of the early US petroleum industry, then, it not a straightforward exercise. Different locations conferred different discrete, industry-specific advantages. Refining clusters did not spring up organically at the well-side. They were built by entrepreneurs and investors who made strategic investment decisions amidst highly uncertain economic conditions and whose investment decisions, in turn, influenced both the growth and the location of the US petroleum refining industry. As the reader will see, the same was true for petroleum manufacturing in Canada. Here, the development of the industry shaped its geography, but its geography also shaped its development.

The second main theme in this study concerns the changing nature of the municipal corporation in Ontario during the period studied: the structure, scope, authority, and resources of municipal government, particularly as they related to business. For businesses, locating within a municipality implies a set of benefits and costs. Both vary across municipalities and also through time, but in modern terms the benefits normally comprise the services provided by the municipality (such as infrastructure, utilities, protection, and cultural and recreation amenities), as well as the social, economic, and cultural characteristics of the community. These benefits also come with costs, which, for business, include property taxes, fees for services, regulations on their operations, and the cost of land and labour. Not all of these costs and benefits are under the control of municipalities, at least not directly. But to the extent that they are, it is useful to conceive of their net impact on a business as the “municipal condition”;⁶ that is, the conditions under which the business can operate in the municipality. This study examines how the municipal condition changed over time, in relation to petroleum manufacturing but also to industry more generally.

When petroleum manufacturing first began, Ontario was mostly a rural society, and so the scale and scope of municipal government was limited. Rural life made few demands on municipal governments, and although many incorporated urban municipalities existed, only a handful had populations exceeding twenty-five hundred persons, and the largest, Toronto, had only thirty thousand persons.⁷ Even in the larger urban centres, municipal responsibilities mostly centred on servicing and protecting real property. Policing and fire protection were important local responsibilities, as was the provision of local physical infrastructure, and, in the largest centres, water and gas utilities.⁸ Some

economic policy responsibilities did exist, but these were minor and consisted primarily of regulating local public markets and licensing certain local businesses.⁹

As the century progressed, however, municipalities began to assume a much broader and more direct role in industrial development as they became actively involved in promoting railways and local industrial expansion through a variety of instruments afforded to them by the provincial government, including land grants, tax concessions, bond guarantees, and cash subsidies. The emergence of the positive local state in the era of new industrialism placed greater demands on local resources – mainly the property tax – and was accompanied by a gradual expansion of regulatory authorities. Though industrial growth was widely accepted as a legitimate and worthwhile objective for municipalities, the strategies that municipalities adopted and the policies that they enacted varied considerably.

Towards the end of the nineteenth century, this pattern was reversed. The railway boom had slowed, especially in the south, and the province had begun to strip away the direct industrial policy instruments available to municipalities, a process that was essentially completed by the 1920s and a position that has been maintained by successive Ontario governments ever since. Following the 1930s, provincial intervention into local affairs increased, particularly over matters of local public finance. Obligatory municipal expenditures on provincially determined services ate away at the property tax base.¹⁰ By the midpoint of the twentieth century, the existing municipal condition, though it retained some of its old boosterish impulses and rhetoric, had become far more uniform across the province and less relevant to the location and investment decisions made by industry.

Many would argue that this description still applies to modern municipalities in Ontario and elsewhere in Canada. Municipalities remain wedded to the property tax, and large proportions of their revenue go to fund services and programs whose contents are heavily determined by provincial officials. In other areas of municipal jurisdiction, provincial regulations and standards constrain the scope for local initiative and experimentation.¹¹ In the area of industrial policy, all provinces effectively prohibit their municipalities from delivering selective inducements to industry, such as tax concessions, loans, grants, subsidized land, and discounted utilities.¹² Of the few direct industrial policy instruments that municipalities can deploy, most pertain to land. Municipalities can purchase or expropriate land suitable

for industrial uses so as to assist business with site assembly needs. They can enhance the attractiveness of industrial land through the provision of physical infrastructure and services, such as sewer and water mains, and roads or railways that provide access to transportation networks. They can encourage investment by providing regulatory accommodations, such as the easing of zoning regulations on building height or density. And marketing and advertising campaigns can be used to disseminate information about the municipality's advantages as a site for new investment and as a destination for skilled labour. Indeed, as one recent study on local economic development initiatives in Ontario concluded, "Marketing activities have been, and continue to be, the centrepiece of Canadian local economic development initiatives."¹³ But because land and location search costs comprise such a small percentage of business expenses, it is argued that municipal policies in those areas exert little influence over business investment decisions.¹⁴ The contemporary municipal condition, then, is one that is highly promotional but now perhaps hollowly so, with only marginal influence on economic growth.¹⁵ To put it more simply, modern municipalities appear much more interested in business than businesses are in them.

In this study, the origins of this contemporary municipal condition are explored. Particular emphasis is given to direct municipal industrial policy instruments – namely, the much-maligned municipal bonus, in its various forms. As the reader will see, a view commonly expressed at the time, and occasionally expressed now, is that municipalities were too liberal and fiscally irresponsible in awarding such bonuses. Hence, the province was compelled to prohibit such practices to save its municipalities from ruinous competition and to protect its own credit rating as well as those of the municipalities. Others, viewing the Canadian experience from a US perspective, argue that provincial governments, constitutionally and politically unrestrained in their legal domination over municipalities, drove municipalities out of policy areas that they sought for themselves, including those related to industry.¹⁶ Here, from the vantage of municipalities, a different picture emerges.

The third theme in this study cuts across the first two and concerns the interrelationships between changes in the structure, scope, scale, and geography of petroleum manufacturing and in the prevailing municipal condition that the industry encountered. It is widely understood that the process of industrialization had profound effects on municipal government in North America. Early scholarly contributions