

**OPPORTUNITIES FOR THE
EXPORT OF CANADIAN
HOUSING EXPERTISE IN
TRADITIONAL MARKETS**

**EXECUTIVE
SUMMARY**

Prepared By:
Trema Gestion Conseil Inc.

for
Canada Mortgage and Housing Corporation

June 15, 1993

Acknowledgment

Canada Mortgage and Housing Corporation would like to thank the members of the Advisory Committee on this project for their assistance:

Canadian Home Builders' Association

Energy, Mines and Resources Canada

External Affairs and International Trade Canada

Industry, Science and Technology Canada

National Research Council

Complete Report

The complete report by the same title is available from the:

Canadian Housing Information Centre
Canada Mortgage and Housing Corporation
700 Montreal Road
Ottawa, Ontario
K1A 0P7
(613) 748-2367

EXECUTIVE SUMMARY

Context and purpose of the study

Residential construction is an important contributor to the Canadian economy. In 1990, total spending on new housing and renovation was estimated at \$42 billion, roughly 7% of Canada's Gross Domestic Product. Housing activity directly or indirectly resulted in the generation of almost 1.3 million person-years of employment in a variety of industries across the country; over half is due to renovation work. Every construction job in new homebuilding and renovation results in more than two spin-off jobs in other industries across Canada.

The business environment that has supported the development of the Canadian housing industry is currently undergoing dramatic changes. Although the industry has historically had to adapt to recurring business cycles, the globalization of markets and the removal of trade barriers will compound to further challenge the industry. Such changes in the industry's planning and working environment require adjustments in the industry's strategic positioning both in domestic and external markets. Productivity improvements, the development of innovative and competitive technologies and the identification of and access to export opportunities in foreign markets could become key elements of the industry's overall response to such changes.

Canada Mortgage and Housing Corporation (CMHC), whose role among others, is to assist the housing industry to adapt to changing business conditions, is identifying potential avenues worth exploring with an integrated and comprehensive approach. Among these, exports of Canadian housing technologies and services in traditional markets of North America, Western Europe and the developed regions of the Pacific Rim have been identified as one of the potential solutions that could strengthen the housing industry and the Canadian housing delivery system as a whole.

In the past, with the assistance of programs and networks, the Canadian housing industry has developed a definite but rather focused experience with international trade. The latter has been clustered mainly around export of building materials and products (mostly dimension lumber) and exports of wood frame manufactured housing. Some export expertise is currently developing for more value added products such as windows, doors, panels, walls and mechanical systems. With some exceptions, few export initiatives of services and technologies have been successfully implemented in the traditional markets of North America, Western Europe and the Pacific Rim.

This situation, together with the need for the housing industry to position international trade in its strategic thinking, have prompted this study undertaken by TREMA GESTION CONSEIL INC with the financial sponsorship of CMHC. The goals were to assess the impact of changes in the global environment for trade on the competitiveness of the Canadian residential industry, identify Canadian technologies and services which have export potential in traditional markets and finally, suggest strategies for members of the private sector to access available assistance.

Scope of the study

The study focus has been oriented by CMHC and its Advisory Committee toward opportunities abroad for Canadian housing-related technologies and services that are

commercially available in Canada. This scope includes low rise and high rise residential construction and renovation. While Canadian housing products are not the focus of this study, since there has been considerable experience with housing products in international markets, product experience has been noted where appropriate.

The primary audiences in Canada for this study are the mainstream segment of service and technology providers in the housing industry: e.g. the community of home builders (both on-site and off-site construction and renovation) and the upstream segment of service and technology providers in the housing industry: e.g. residential land developers and architects.

After a preliminary literature review and comprehensive in-person interviews with the Regional desk directors at External Affairs and International Trade Canada (EAITC), Tremaguestion conseil inc. has focused its detailed information gathering activities on a sample of 6 countries:

- U.S.A. because it is Canada's primary traditional export market;
- Mexico because of the North American Free Trade Agreement (NAFTA), its growth potential and housing needs;
- Japan because the Japanese construction market is as big as those in the U.S. or European Economic Community (E.E.C.);
- Germany and Spain because they both have huge housing needs to be served;
- France, because of the lack of wood frame housing supply (despite the current turmoil in the French construction industry and market)

As developed countries, each of them has a strong and mature domestic construction industry as well as a financing system and standards and regulations that have been strengthened over time to suit or shape local needs.

Key findings

Exporting is one of the most difficult ways to do business. The challenge in competing abroad is especially large in housing activities since housing is by nature a local business shaped by different customer tastes and living habits, different regulations and standards and by established local supply. These local patterns are particularly strong when considering developed countries.

However, the Canadian housing industry has developed competitive strengths and strong areas of expertise for example, (wood frame housing, energy efficiency housing, housing for seniors). Some Canadian firms do have the ability to export their products, services and know-how. In fact, a significant number of Canadian companies are already active in the U.S. market and, to a lesser extent, in Europe and in Asia. With careful planning, targeted market intelligence, good use of the support provided by government and industry associations, and a cautious but nonetheless dynamic and focused approach, Canadian companies can find new business opportunities, undertake risk diversification and foster exchanges on an international basis that could help them to be more competitive in their domestic markets as well.

When reviewing the six countries studied in this research, three broad categories of business opportunities appear:

1. Opportunities presented by a disequilibrium between supply and demand in a given region which may have resulted from a number of factors, related to historical circumstances or which are structural in nature:
 - urgent needs resulting from a sudden crisis requiring the provision of quick solutions: earthquake, hurricane e.g. Florida after Hugo's passage;
 - huge one time capital intensive projects such as World Fairs (Seville 1992), Olympic Games (Barcelona 1992, Atlanta 1996) or large domestic projects (downtown rehabilitation, social housing, etc.);
 - accelerated economic growth that has created customer demands that outpace the local industry's capabilities to deliver (as in Spain for example);
 - demographic needs and trends (trade-up housing) that the local industry is unprepared for and cannot fully meet (Germany and Mexico);
 - changes in laws, regulations or standards that create a short term opportunity for foreigners while the local industry is adjusting e.g. (wood frame housing opportunities in Japan resulting from changes to the building code and specific demands for rehabilitation projects in downtown areas).
2. Opportunities for value-added by foreign contractors, originating from a unique expertise, specialized skills or specific products e.g. (energy efficient housing, housing for seniors) or from customers simply looking for different products as a way of differentiation, both from an importer and a homeowner point of view (Japan and Spain).
3. Opportunities arising from a piggy backing approach:
 - countries where financing capabilities (money or know how) will provide an important edge (Mexico, Spain and also Eastern Germany where the ability to finance a project is lacking);
 - countries where special training is required (Spain and France where both architects and labor are not familiar with wood frame houses);
 - countries and companies looking for technology transfers and transfer of expertise to improve their competitiveness (Mexico).

From a general point of view, Canadian companies should expect some difficulty in carrying out on-site building activities abroad since the vast majority of developed countries have strong laws to impede foreign labor working in their territory (USA for example) or at least to limit this ability (Japan). Both developers and home builders should focus their foreign activities on turnkey projects (resort village projects in the U.S.A, Mexico, France and Spain), social housing projects (Mexico) or custom designed projects, and on technology transfers e.g. (planning, financing, site management, cost control procedures). High-rise housing markets in developed countries seem to be very difficult to penetrate since the major domestic companies are heavily involved and

have considerable control over that business. On the other hand, there are definitely numerous opportunities in manufactured housing.

Whereas architectural services are available in every developed country, a number of Canadian architects have specialized expertise which could be in demand abroad. Thanks to Canada's geographical and cultural proximity and the efforts that have been made up to now, the U.S. market seems to be the most natural market for Canadian architects. However those who can satisfy and are willing to work to meet the required criteria eg. (language skills, registration) could also do well elsewhere (Spain and Japan).

As for building materials and hardware which have been traditionally the main lines of Canadian housing exports abroad, opportunities exist in all countries for competitive or innovative products supported by a strong marketing and standards approach.

This report includes a chart that summarizes the key elements and relevant assistance that should be considered by any Canadian company wanting to export.

U.S.A.

The United States construction market is the largest in the world. Construction expenditures in California alone are approximately equal to those in Canada. There are 41 metropolitan areas with a population exceeding one million, compared to 3 in Canada. The U.S. has been and continues to be Canada's major export market because of its proximity and cultural and linguistic similarities.

A large number of Canadian companies are already very active in the U.S. market, especially in the commercial construction market and in the hardware and building products segments. The U.S. market indeed offers a range of export opportunities for Canadian firms:

- Factory-built housing, which counts for about 14% of housing starts, has established a solid niche in the U.S. but has shown limited growth. Skilled labor shortages could act as a stimulus.
- With demographics favoring trade-up housing, there will be good opportunities for small specialized builders offering custom houses to serve this niche.
- Canadian architects can do well in the U.S. market, provided that they are able to bring along specialized skills. Opportunities have been identified in a number of downtown and waterfront revitalization projects both on the Atlantic Coast and on the Pacific Coast. Because of the liquidity crunch in the U.S., several middle-sized projects cannot be financed and Canadian architects and developers, working in partnership with a U.S. developer, could combine their resources to carry on these projects.

The Canadian Consulate General in Boston identified promising market opportunities for Canadian building materials and hardware (BMH) companies in the New England market of 10 million population, especially for the home repair, refurbishment and do-it-yourself remodeling market. Other opportunities for BMH can also be found in the other states.

- R-2000 technology and products could take advantage of several factors: geographic and climatic diversity resulting in demands for technology responsive to both heating and air conditioning needs, increasing energy costs and a growing awareness of the importance of energy efficiency in new housing.
- The environmental movement to protect old-growth forests in the U.S.A. has curtailed the available timber harvest to such an extent that prices have increased sharply and there is a supply problem.

Mexico

Up to now, Canada's export of construction materials and services to Mexico has been minimal, with total exports of CDN\$ 21.6 million in 1991. Two factors make the Mexican market a promising one. First, the North American Free Trade Agreement, will ensure that tariffs drop dramatically over a period of years. Second, the current strategy of the Mexican Government, supported by the World Bank, is to create a more supportive environment for the private sector to play an expanded role in solving the country's housing problems (35% of Mexico's population lacks adequate housing and the housing deficit is estimated at 6 million units). This should encourage the Mexican construction industry and also facilitate opportunities for Canadian companies to become partners in that process.

Mexico's market is highly competitive, but Canadian companies can do well by maintaining an active presence in the market and by establishing a good track record based on product performance, competitive price and support. Sales in Mexico are usually made through local agents and distributors, normally operating on a commission basis, or through the Mexican affiliates of foreign companies. Canadian companies have to decide whether to use an agent or to make joint venture or licensing agreements with a Mexican partner. Due to the complexity of construction regulations, financial practices in this industry and labor relations, many foreign firms have selected the joint venture option as the best way to penetrate the Mexican market.

Technical seminars are an appropriate means to promote Canadian materials, services, and technologies for the housing industry. The use of well-trained salesmen with technical knowledge, the ability to communicate in Spanish, as well as a strong support system for the customer are important.

Japan

Costs to do business in Japan are very high. A long term commitment, of at least a couple of years, is required before money can be earned. However, Japan offers a great potential and real opportunities, either for doing business locally or for shipping wood frame structures, panelized houses or building materials from Canada. A Canadian firm willing to succeed in Japan has to build a bridge to start with and then has to prove its capabilities. A proven way is to set up a joint venture or a strategic alliance with a Japanese partner. It is important to develop close ties with the Japanese in order to do business with them. A local presence or frequent trips to Japan are normally necessary and the ability to do business in Japanese is also strongly recommended.

There are real opportunities for Canadian companies in Japan involving 2X4 wood frame houses, prefabricated houses and high quality building materials and hardware and selected niches:

- Good opportunities for Canadian companies exist in the building of 2X4 houses, because of Canadian know how and lower costs. This part of the Japanese industry is said to be open-minded and willing to work with Canadian companies.
- Prefabricated houses are benefiting from competitive price, high quality standards (fire and earthquake protection) and the labor shortage. They are especially adapted to dense urban centres where substandard houses are being replaced.
- R-2000 houses and insulated doors and windows offer good possibilities in the northern part of Japan (Hokkaido, five million people) because of the colder climate. Since May 1990, a royalty-free licensing agreement between EMR Canada and the Japan 2X4 Home Builders Association has existed. This agreement favors the image of Canadian component products since it requires all houses built under this program to display the Canadian R-2000 logo.
- Many Japanese companies are looking for exclusive products and technologies, this represents opportunities for Canadian companies.
- The opening up of the Japanese market has been moving forward in recent years and the number of structures designed by overseas designers is increasing.

Germany

The German market, especially the former East Germany, presents real opportunities because of the accumulated shortage (1.7 million units in the West and 1 million units in the East). This has resulted in a major need for new housing units (500,000 units annually required in the West, 100,000 in the East). In the West, the crisis is mainly in social housing in big cities. In the East, there is a strong need both for new units and for renovation due to the disastrous state of housing conditions. The crisis in the former East Germany is much deeper than in West Germany: relative needs are larger and urgently required and financial capabilities are lower. West German companies seem to be unable to meet these needs because they lack the capacity to do so and because their way of building (concrete houses) results in long delays and in high costs.

Opportunities are mainly in the delivery of wood frame structures for houses up to 3 storeys and housing components (windows, doors, kitchens, etc.). The main competitive opportunity for the Canadian housing industry, especially in the former East Germany, seems to be its ability to offer affordable and quick housing solutions. There are also good opportunities for custom designed high quality timber frame houses in West Germany.

In doing business in Germany, it is important to have a local presence and representatives with German language skills. Given the fact that contractors are operating on a highly localized level, Canadian firms have to be prepared to undertake joint projects with German partners who know the rules, the local situation in respect of planning, the availability of labor etc. and are able to obtain better cooperation from local authorities. The German partner will benefit from the know how, the management expertise and the ability to put together a financial package offered by its Canadian partner. In the new states, the ability to finance a project is practically non-existent.

Spain

Spain is the EC's fastest growing construction market, and is in fact still booming due to a very rapid rise in private commercial building and housing refurbishment. Construction growth rates are estimated at about 10% in general and about 5% for housing (less for new construction and more for refurbishment).

Benefiting from strong demand for both new units and refurbishment, the Spanish housing market could present good opportunities for Canadian companies, especially those with both know-how and a willingness to undertake strategic alliances with local firms. The main problem in Spain is availability of financing to satisfy the need for housing, even with EC funds. There is a requirement to arrange financing for major projects. Being in a position to supply the required funds to finance a project, even a small or medium one, can provide a significant advantage entering the market.

Opportunities range from luxury and California-style houses in prospering suburbs, to manufactured and wood frame houses designed to be affordable and able to be constructed quickly:

- Manufactured houses and wood frame houses present good opportunities as affordable and quick-delivery housing. There are some barriers to be overcome at the consumer and architect level. But the main problem to cope with is the shortage of skilled labor to build wood frame structures. It would be therefore essential to bring Canadian teams to teach Spanish workers how to build wood frame structures.
- With the development of prosperous suburbs, a growing demand for luxury American-style houses is developing as well as a growing demand for second homes for prosperous Spanish families. However, due to the high stock of unsold second homes, especially in the coastal areas, this market seems to be less attractive for the time being.
- There has been an increasing foreign demand for holiday homes on the coast due to a growing tourist industry.
- Canadian architects could play a key role in training Spanish companies in wood frame construction.

France

Despite a severe crisis in construction activities, France is nonetheless the second housing market in Europe after Germany, and can offer opportunities for Canadian companies with innovative products or special know-how. The French housing market is very difficult to penetrate because of its numerous and complex regulations and practices and also because the French concrete industry is very strong and has a strong grip on the market.

Wood frame construction has been traditionally very limited in France, accounting for less than 10% of total housing units. However, it seems that this situation is mainly due to an insufficient wood construction supply compared to the strength of the traditional concrete industry. Should a competitive and structured supply be provided to French customers, wood frame construction could experience growth potential. Rather than

directly confronting French homebuilders, it is recommended to proceed through strategic agreements and joint ventures, bringing the technical expertise and benefiting from the access to the market of a French partner.

Assistance available from the federal government

Government agencies provide extensive assistance to industry for the development of international trade. This assistance comes from multiple sources and is delivered through a complex system of interrelated programs and services delivered by agencies with different missions and organizational structures.

Federal assistance and programs can be very useful for Canadian housing companies interested in seizing market opportunities in the developed countries of North America, Western Europe and the Pacific Rim. The role and programs of the major federal agencies involved in this area are detailed in the report and can be summarized as follows:

- Industry Science and Technology Canada (ISTC) is the primary repository of federal government knowledge about Canadian residential industry capabilities, profiles, competitive strengths in Canada and experience to date on international markets.
- The role of External Affairs and International Trade Canada (EAITC) is to promote the industry internationally and to support the international marketing activities of Canadian housing companies.
- The Export Development Corporation is Canada's official export credit agency. It helps build Canadian exports by providing insurance as well as financing and guarantee services that enable Canadian companies to sell competitively and safely in world markets.
- Canada Mortgage and Housing Corporation (CMHC) is the federal lead agency in domestic matters pertaining to housing and related urban development. In order to help housing markets adapt to changing technologies and needs, CMHC works in partnership with industry to facilitate innovation in housing technology, to increase information transfer and to help the industry to identify international opportunities.
- The Institute for Research in Construction (IRC) is a division of the National Research Council of Canada. Its mission is to provide the construction industry with the best possible technology. Through its Industry Liaison Branch which is IRC's technology transfer arm, it contributes to the competitiveness and productivity of the Canadian construction industry by facilitating access to national and international construction technology.
- Energy, Mines and Resources Canada is the federal lead agency in matters pertaining to energy. Since 1982, EMR has developed and been responsible for the strategic management of the R-2000 program in Canada and for developing the export potential of the concept and technology abroad. The technology and expertise developed by the R-2000 program is positioned as a leading edge in the field of cold climate, timber frame, energy efficient house construction. Program implementation has been the responsibility of the Canadian Home Builders' Association (CHBA) and provincial homebuilders associations.