



Fitting In

From Consideration to Integration project to help international engineering graduates succeed in Canada

Rising numbers of immigrants are coming to Canada to make a better life for themselves and their families. More than 60 per cent of skilled workers in the recent immigrant population intend to practise engineering—but many are struggling to understand the marketplace and find suitable employment. Here's a look at a national project to help international engineering graduates integrate into the Canadian engineering community.



aeed Ziaee, P.Eng., came to Canada in the early 1990s on a mission from his consulting firm in Iran to research Canada's manufacturing industry. He ended up at the engineering library at the

University of Toronto where he was introduced to the Internet and its access to a world of opportunity.

"For me, it was very exciting to have access to information on universities and companies. I realized that something was happening here and I wanted to be a part of it," says Ziaee, who today runs his own company in Toronto, Intelligent Engineering Solutions Inc., which develops products for medical diagnosis and treatment. Establishing himself in Canada didn't come without a lot of hard work, though, including a master's degree in applied science from the University of Toronto and ongoing night classes in English and business.

"People come here looking for a better quality of life. For a newcomer, it's finding a job. For one who has a job, it's a better job. For a retired person, it's looking for the culture," says Ziaee.

Getting connected

Ziaee is an advocate for immigrant access services and helps run Mohandes, an Ontario-based organization for Iranian engi-

neers to network and socialize. Ziaee also sits on the steering committee for the Coalition for Access to Professional Engineering (CAPE), a non-profit group that received government funding in January to establish a database of international engineering graduates in Canada and develop an outreach support organization.

"What's frustrating for [immigrant engineers] is the lack of a network" or point of contact, to orient them to the marketplace, to licensure by Professional Engineers Ontario (PEO) and to services available for language training and edu-

cation upgrades, he says. Ziaee believes the upcoming database will go a long way to put international engineering graduates in touch with the services and resources being developed to facilitate better integration

Now, Ziaee and many other interested stakeholders have been given the opportunity to voice their concerns about access to the engineering profession for internationally trained engineers—and are working to develop a plan of action to help them better integrate into the engineering community. In January 2003, the Canadian Council of Professional Engineers (CCPE) received funding from the federal government to launch "From Consideration to Integration," an ambitious three-phase project designed to encourage adoption of best practices in foreign credential evaluation by occupational licensing and regulating bodies and in integration of internationally trained professionals into the Canadian workforce. Phase I gathered information on the foreign credential evaluation models used in Canada for engineering and other professions, and examined integration programs offered by settlement groups and other non-engineering organizations. The project steering committee comprises 25 people from engineering regulators and advocacy bodies, the federal government, international engineering graduates and industry across Canada. About 200 people have participated in the project to date.

Phase II, which recently received its go-ahead from the government, aims to identify integration problems, improve available information for international engineering graduates on engineering regulation, licensure and employment in Canada, and establish foreign credential best practices. Over the next few years, Phase III would see implementation of the agreed models and approaches.

It's intended that the final product be a clear road map for international engineering graduates to follow from the moment they consider immigration to

Canada until they are integrated into the engineering profession here as licensed engineers, says Deborah Wolfe, P.Eng., CCPE's director of education, outreach and research, who is directing the project.

"We are looking at improving current programs to make them as efficient as possible, without compromising public safety or lowering standards. International engineering graduates will still have to meet the requirements [for licensure]," Wolfe says.

Research for the project's first phase involved focus groups with immigrants and interviews with employers. In Phase II, subcommittees were established to investigate specific issues, such as information available to immigrants; culture, language and interpersonal skills; licensure; and integration into the workforce, says Wolfe.

A key aspect of Phase II will be the validation of research findings by CCPE's member licensing bodies and other stakeholders, prior to the launch of Phase III. Phase II is set to present its recommendations at CCPE's annual general meeting this May.

"This is not something we're doing in isolation. We have to collaborate to come up with workable models that can be adapted to suit the needs of each jurisdiction," Wolfe says, pointing out the need to ensure inter-association mobility for professional engineers.

Assessing credentials

Access to the engineering profession is a hot topic, given the rising numbers of internationally trained engineering graduates coming to Canada, and Ontario in particular. According to Citizenship and Immigration Canada, immigration figures from 2001 show that 44 per cent of the skilled workers indicated an intention to work in a regulated occupation. Of that number, 63 per cent identified engineering as the intended profession. Although the engineering profession in Canada has been licensing international engineering graduates for decades, the profession is always looking for ways to improve the process.

"Immigration is a reality in this country, so we need to do something about it.

By Karen Hawthorne

These engineers need to get licensed and get jobs," says Wolfe. "Canada needs to have a skilled and knowledgeable workforce and this project supports Canada's innovation strategy."

Wolfe notes that the project has tapped into a government priority of helping with the recognition of foreign credentials and speeding the integration process for foreign-trained professionals in all fields. Regulators of other professions may adapt the models and approaches developed by From Consideration to Integration. In fact, of the estimated \$490,000 cost of Phase I of the project, all of the cash costs were paid by the federal government's Human Resources and Skills Development (formerly Human Resources Development Canada). The engineering profession covered the remainder with in-kind contributions, such as time for volunteers.

"The issue of labour market integration is top of mind on the government's agenda," confirms Chris Bolland, acting

of people coming here, especially in terms of being realistic," Bolland says. "As with Canadian-born university graduates, there is no guarantee of a job, but there is a way to encourage better connections, better labour market information and access to language training."

Culture shock

According to CCPE's 2002 national survey, 12 per cent of Canada's professional engineers received their education in other countries. But the number of immigrants who identify themselves as engineers for immigration purposes doesn't equate with the number of immigrants who eventually become licensed as professional engineers, because of differences in definitions and the choice of different career paths once in Canada.

Of the 40,000 immigrants with engineering backgrounds who have settled in Ontario over the last four years, only 9 000 have applied for licensure, explains Michael

"The fact that the engineering profession is regulated here is a huge cultural issue," notes Wolfe.

Previously, CCPE played a role in the immigration process by assessing potential immigrants to determine whether they appeared to have the academic requirements for licensing in Canada. When the federal immigration department changed its skilled worker criteria, CCPE's pre-screening initiative was canceled.

As early as 2001, PEO began an outreach program to help prospective engineering immigrants understand the licensing requirements and process in Ontario. The program includes a fact

"The issue of labour market integration is

manager, foreign credential recognition, human resources partnerships, Human Resources and Skills Development (HRSD). Information from Statistics Canada shows that within the next 10 to 15 years, Canada's workforce will depend on the immigrant population, Bolland says. "There's not so much of a shortage [of skilled workers] in engineering in Canada now, but that's going to change."

The rising influx of immigrant engineers into the system has to be addressed, Bolland says, not only from the standpoint of engineering regulators across the country doing their job of regulating the profession, but also from the standpoints of Citizenship and Immigration Canada, HRSD, educators, industry and settlement agencies.

"We—the global we—the many players involved—have to manage the expectations

Price, P.Eng., PEO deputy registrar, licensing and registration. "What's happened to the other 31,000 people? They may be technicians or technologists, but there are certainly more than 9000 who have the appropriate university education to meet our requirements," says Price, who sits on the From Consideration to Integration steering committee and licensing subcommittee.

One of the most often cited problems for immigrants is lack of information, or even misinformation, about the engineering profession in Canada and the Canadian marketplace, which is complicated by the fact that many countries do not license and regulate their engineers. Such high source countries/territories of immigrant engineers, as China, India, Russia and Pakistan do not have a licensing process. Graduates come out of engineering school, call themselves engineers and begin to practise.

sheet for prospective and new immigrants, developed in concert with the Ontario government, and includes enabling prospective immigrants to begin the licensing process prior to making a final decision to immigrate. Immigrants are able to continue the licensing process, initiated through an application form available from PEO's website, once they arrive in Canada. PEO also makes presentations to settlement organizations such as Skills



for Change, reaching about 3000 immigrants per year, Price says.

Fact-finding

Other engineering regulators are also taking action: Manitoba (APEGM) is working with the University of Manitoba on a co-op pilot project with international engineering graduates; Alberta (APEGGA) is considering another category of licensure for international engineering graduates; British Columbia (APEGBC) has recently completed a two-year pilot project funded by the BC government, to assist international engineering graduates in obtaining the required one year

Consideration to Integration. In addition to reviewing APEGBC procedures and the information available to candidates for licensure, the B.C. pilot tested a “work experience-in-training module” for 20 international engineering graduates to experience intensive job search training, Canadian “climatization” and one-on-one direction from senior professional engineers.

“Really it became a fact-finding mission for them,” says Pichler, commenting on the need for information and networking opportunities. At the end of the pilot last December, half of the participants landed engineering jobs.

“Some people come here expecting the streets to be paved with engineering jobs, but they’re not,” she says. “People can get very bitter and blame the government and blame the licensing bodies,” she says. “We have to clear up the myth Canada-wide that people who come to Canada classed as an engineer are going to get an engi-

mate in Canada is far different than other parts of the world, notes project participant Patrick Coady, who has worked as a consultant dealing with the internationally trained professional issue for more than 10 years, including for the former Human Resources Development Canada to set up bridge training technical programs for foreign-trained professionals. He is the coordinator for the British Columbia Internationally Trained Professionals Network, which is helping IEGs in B.C. form their own society (the Society of Internationally Trained Engineers in B.C. or SITE B.C.)—a network for direction and support. He would like to see a shift in the attitude toward foreign-trained professionals to welcome them to the marketplace.

“We have a very insulated and cautious way of doing business in Canada,” Coady says. Some of SITE B.C.’s members are former CEOs and presidents of

top of mind on the government’s agenda.”

– Chris Bolland

Human Resources Skills Development

of Canadian experience for licensing.

“For us, the question is why so many self-declared engineers come to B.C. and don’t get licensed and don’t work in engineering,” says Gillian Pichler, P.Eng., APEGBC director of registration.

Having completed a similar project at the

provincial level to discover how better to orient international engineering graduates, Pichler says APEGBC has a “lot to bring to the table” for From

neering job. An engineer is not a commodity, there is lots of specialization, and certain specialties are in more demand than others.”

Pichler says the national project is encouraging, timely and has created a dialogue among the stakeholders. There is support for the project from coast to coast, she says. “During the consultations, we really listened to the concerns of others, and recommended solutions will not be ‘by engineers for engineers’; they will involve government, employers and the international engineering graduates themselves,” she adds.

Multilateral approach

But the project is seen only as a first step toward tackling a growing and complex situation. On top of such issues as language and licensing, the business cli-

companies in their lands of origin. They have worked on projects around the globe. In countries such as the U.S., attitudes are different, he says: “In the U.S., people want to know what you can contribute and what you’ve done.” In Canada, employers are much more cautious and look for Canadian credentials and experience.

Coady’s advice for SITE B.C. members is often to upgrade their soft skills and their education at a technical college to cement their credentials in the eyes of potential Canadian employers.

He is encouraged by the From Consideration to Integration Project for its willingness to include input from the international engineering graduates themselves—a start toward their building relationships with industry and finding their way in the profession. ❖