

NOMINATION FORM

Nominee Information

Public Sector Procurement Project RETScreen International
 Team Name RETScreen International Team Leader Gregory J. Leng
 Organization NRCAN - Canmet ENERGY (Varenes)
 Team participants Greg Leng, Urban Ziegler, Nathalie Meloche, Kevin Bourque, Farah Sheriff, Amelie Richard, Tommy Anderson, Julien Poinier, Lucie Nolin, Dinesh Parakh
 Category of public sector Government of Canada
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Nomination submitted by

Name Dinesh S. Parakh Title Legal + Program Advisor
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Certification

To the best of my knowledge, I certify that the information provided is accurate and true.

Signature [Signature] Date 29 June 2009

Structure of the submission

The nomination form must be accompanied by an overview of the project you wish to profile. We provide you with the following outline to help you structure your submission. You are welcome to include additional information that you feel is pertinent but the submission should not exceed five (5) pages. If you have any questions, please contact us at award@summitconnects.com.

- Project objectives
- Brief description of the project
- Summary of project experience – How did it go?
- Contribution of project to key criteria:
 - high degree of innovation – new ideas or approaches in either operational or policy settings;
 - measurable and significant benefit – savings, efficiency and effectiveness, satisfy the stated objectives of the project;
 - transferability – the central idea or approach shows some promise for being used in other areas of the public sector;
 - advancing professionalism within the community.
- The submission must include a letter of reference from a senior manager or procurement supervisor on the project – someone other than the team leader submitting the nomination.

PROJECT OBJECTIVES AND BRIEF DESCRIPTION OF THE PROJECT

The **RETScreen® Clean Energy Project Analysis Software** is the world's leading clean energy decision-making software. It is provided completely free-of-charge by the Government of Canada as part of Canada's commitment to promoting clean energy. RETScreen is a proven *enabler* of clean energy projects worldwide.

RETScreen significantly reduces the costs (both financial and time) associated with identifying and assessing potential clean energy projects. These costs, which arise at the pre-feasibility, feasibility, development, and engineering stages, can be substantial barriers to the implementation of clean energy projects. By helping to break down these barriers, RETScreen reduces the cost of doing business in clean energy.

RETScreen allows decision makers and professionals to determine whether or not a proposed renewable energy, energy efficiency, or cogeneration project makes financial sense. If the project is not viable, RETScreen will help the decision maker determine this: quickly, unequivocally, in a user-friendly format, and at relatively minimal or no cost. RETScreen's many sophisticated tools, ranging from energy modelling to product selection, are all tremendously useful in facilitating environmentally-friendly procurement in clean energy.

SUMMARY OF PROJECT EXPERIENCE

RETScreen is presently:

- Used by more than 200,000 people in 222 countries and territories
- Available in 35 languages covering more than 2/3rds of the world's population
- Part of the curriculum in more than 182 colleges and universities worldwide

RETScreen encourages smart purchasing and expenditures of funds, letting the decision-maker know whether or not a proposed project is financially or technically viable. As of 2009, RETScreen has been directly responsible for over **\$4 billion** in user savings globally, a number expected to grow to well over **\$8 billion** by 2013. These are actual dollar savings on projects that have been optimized through the use of RETScreen. By virtue of enabling clean energy, RETScreen indirectly contributes to a substantial reduction in greenhouse gas emissions—a reduction conservatively estimated at 20 million tonnes per annum by 2013. And by 2013, it is estimated that RETScreen will have helped spur the installation of at least 24GW of installed clean energy capacity worldwide with a value of approximately \$41 billion.

Software and Data

RETScreen is the most comprehensive product of its kind, allowing engineers, architects, financial planners, and procurement specialists to model and analyze any clean energy project. Decision makers can conduct a five-step standard analysis, including energy analysis, cost analysis, emission analysis, financial analysis, and sensitivity/risk analysis.

The technologies included in RETScreen's project models are all-inclusive, and include both traditional and non-traditional sources of clean energy as well as "cleaner" conventional energy. A sampling of these project models include: energy efficiency (from industrial facilities to residential), heating and cooling (e.g., biomass, heat pumps, and solar air/water heating), power (including renewables like solar,

wind, wave, hydro, geothermal, etc. but also cleaner conventional sources such as gas/steam turbines and reciprocating engines), and combined heat and power (or cogeneration).

Fully integrated into these analytical tools are product, project, hydrology and climate databases (with 4,700 ground stations plus NASA satellite data covering all inhabited areas of the earth), as well as worldwide energy resource maps. The product database (http://www.retscreen.net/ang/d_data_p.php) allows users to realistically frame their project analysis by browsing through and selecting actual equipment available from different manufactures of clean energy equipment from around the world. Related to this product database is RETScreen's Marketplace (<http://www.retscreen.net/ang/13.php>) which lists manufacturers of clean energy equipment worldwide and links directly to their websites, greatly facilitating the ability of procurement personnel make informed decisions about clean energy capital equipment.

So, at a macro level, RETScreen can tell you what type of clean energy project will make the most financial sense to build in your particular location, while at a micro level, it can tell you which type of light bulb or insulation will maximize your energy efficiency and cost savings.

Training

Training is an integral feature of RETScreen and helps to ensure that the program is used properly and up to its potential. Available within the downloaded software or on the website are training modules varying in length from single lecture to multi-day course. Taken together, the training modules are sufficient to run a 2-4 week intensive or a 1-2 semester regular course. Included in the training materials are:

- extensive webcasts, presentation slides, and instructor notes;
- well over 100 case studies including assignments, worked-out solutions, and information about how the projects fared in the real world;
- a detailed user manual;
- an engineering e-textbook which provides a detailed description of the algorithms used in the energy models

Partners

RETScreen is managed by Natural Resources Canada's CanmetENERGY research centre in Varennes, Quebec and is supported by an international network of experts in clean energy. Principal partners include the National Aeronautics and Space Administration (NASA), the United Nations Environment Programme (UNEP), the Renewable Energy and Energy Efficiency Partnership (REEEP) and the Global Environment Facility (GEF).

Media and Accolades

RETScreen has been internationally recognized with awards such as the 2001 *Head of the Public Service Award* for excellence in service delivery and NASA's Group Achievement Award.

RETScreen has been written about extensively in the media. Below are links to a sampling of key articles that have been published in recent years:

- **Summit Magazine**, March 2006, in which the author, David Newman, was "blown away" by RETScreen: http://summitconnects.com/Articles_Columns/PDF_Documents/200603_06.pdf

Here is an excerpt from the article:

“People get excited about the potential of renewable energy but they often don't understand the economics of individual projects. RETScreen helps determine how much money would be saved using renewable energy technologies, choosing the appropriate component or system for their projects and helps avoid wasting money.

As NRCan itself points out, commercially viable clean energy projects are often missed because decision makers simply don't consider them. Planners, industrial engineers, architects, utility and community energy planners and, yes, procurement specialists too, often fail to appreciate the benefits of energy efficient and renewable energy technologies at the critically important initial planning stage, even when they have proven to be cost-effective and reliable in similar situations elsewhere. The result is missed project opportunities that could otherwise meet energy needs locally and in a sustainable manner, reducing greenhouse gas emissions, saving money and increasing energy security. Informed procurement decisions are an increasingly important component in choosing clean energy projects....

This is all wonderful, possibly even revolutionary, and no doubt, many specialists in green and energy procurement or building life-cycle maintenance are feeling their pulse quicken just reading this. In a world where "green" and "sustainability" are no longer just buzz words, successful modern procurement specialists are realizing the value in helping set solid user requirements, scopes of work, compliance standards evaluation and success measurements, and other key procurement instruments and processes based on what is now possible.”

Other recent articles about RETScreen:

- Energy Management, March 2008 (p. 20ff): http://zegapi.com/view/?book_name=EMMar08
- Osprey Media, May 2009: <http://www.niagarafallsreview.ca/ArticleDisplay.aspx?e=1562101>
- The Professional Edge, April 2008 (p.13ff): [Click here](#)

CONTRIBUTION OF PROJECT TO KEY CRITERIA:

- high degree of innovation – new ideas or approaches in either operational or policy settings;

As other parts of this submission show, RETScreen demonstrates a high degree of innovation by taking an entirely new approach to the expansion of markets for clean energy: breaking down the information and technical barriers that prevent such projects from being realized. RETScreen fills a glaring market gap for pre-feasibility analysis and allows more potential projects to come to fruition, thus expanding the global market for energy efficiency projects. Perhaps more importantly, RETScreen has become the standard software tool—to the extent of being designated as mandatory—for various types of energy projects in a growing number of jurisdictions, including numerous provinces/states/regions in Canada, the USA, and the UK.

- measurable and significant benefit – savings, efficiency and effectiveness, satisfy the stated objectives of the project;

The fact that RETScreen currently has over 200,000 users attests that RETScreen has been a tremendous success, with significant and measurable benefits attributable to the software.

RETScreen Performance Indicators	Present Impact (1998-2009)	Future Impact (1998-2012)
User Savings	\$4 billion	\$8 billion
Installed Capacity	7,500 MW	24,000 MW
Installed Value	\$13 billion	\$42 billion
GHG Reduction (CO₂ equivalent)	7 MT/year	20 MT/year

- transferability – the central idea or approach shows some promise for being used in other areas of the public sector;

Thanks to its global databases and 35 languages, RETScreen is inherently transferable and can be used by procurement specialists and other professionals around the world. Accessible, relevant, and usable throughout the entire inhabited world, RETScreen already has a global reach and can be used anywhere in the world by anyone with access to a computer. The marginal cost of maintaining, supporting and distributing RETScreen is negligible.

RETScreen is already used extensively throughout the Canadian government. A quick search of our customer database reveals nearly 1,200 users of RETScreen from numerous ministries at the federal level alone; there are thousands more users from the various provincial governments (including utilities, etc.)

- advancing professionalism within the community

RETScreen is well on the way to becoming the global standard for clean energy project analysis. By centralizing the best practices and best tools for clean energy project analysis in one convenient program, it undoubtedly advances professionalism in clean energy and its associated procurement practices.

This unique role of RETScreen has been recognized by such august institutions as the G8. According to the *2001 G8 Renewable Energy Task Force Chairmen's Report*, "...there is sufficient interest among developed and developing country public and private sector for more co-ordination and stronger links through common codes, rules, and procedures, to build global market conditions. RETScreen is a tool to enhance such market coherence."¹

CONCLUSION

Internationally recognized for its unique achievements, RETScreen is expanding and energizing the global market for renewable energy technologies, encouraging the implementation of energy efficiency measures, and contributing to a sustainable and clean energy future. Dollar for dollar, and person for person, no other intervention in the clean energy sector has delivered such a large global impact. And as a tool to encourage and facilitate "green procurement," RETScreen is unparalleled.

Much more information is available on our website, www.retscreen.net, and we would be happy to provide any additional information that you might require.

¹ Clini, Corrado and Moody-Stuart, Mark, "Renewable Energy: Development That Lasts," 2001 G8 Renewable Energy Task Force Chairmen's Report, p. 41.



renewable
energy
& energy
efficiency
partnership



Dear Madam/Sir,

In my capacity as the Deputy Director General of the Renewable Energy and Energy Efficiency Partnership (REEEP), based in Vienna, Austria, I am pleased to write a letter supporting the nomination of RETScreen International for the Summit Magazine “Leadership in Green Procurement” Award.

The Renewable Energy and Energy Efficiency Partnership (REEEP) is an active, global public-private partnership that structures policy and regulatory initiatives for clean energy, and facilitates financing for energy projects. REEEP’s mission is to contribute to the expansion of the global market for renewable energy and energy efficiency.

The RETScreen Clean Energy Project Analysis Software is an internationally used and recognized software program that helps decision makers determine whether or not a particular clean energy project makes financial sense. It is used in all countries of the world to evaluate the energy production and savings, costs, emission reductions, financial viability and risk for various types of clean energy technologies.

RETScreen greatly facilitates green procurement in many ways and can be used at all stages of the procurement process. To give just a few examples, RETScreen helps users understand the different clean energy options available to them and provides access to product information from different manufacturers of clean energy equipment. RETScreen can help one determine the best modality of retrofitting a building for greater energy efficiency; whether a solar photovoltaic, concentrated solar power, or solar thermal installation makes the most sense from an energy and financial perspective; or even which particular type of light bulb or insulation will maximize energy efficiency and cost savings. It truly is a remarkable product that leads to intelligent decisions on purchasing and procurement for clean energy.

REEEP has worked with RETScreen on several projects in the past, and has just awarded RETScreen funding (in May 2009) to develop a new Monitoring, Targeting, and Verification tool. This tool, which will be integrated into RETScreen, will further enable optimal procurement decisions in the realm of energy efficiency.

In both Canada and around the world, RETScreen has demonstrated true leadership and innovation in green procurement and has become the global standard for green energy decision-making and procurement. RETScreen would certainly be a worthy recipient of the “Leadership in Green Procurement Award”.

Sincerely,



renewable
energy
& energy
efficiency
partnership



Vienna, 26th of June 2009,

A handwritten signature in black ink, appearing to read "Binu Parthan".

Binu Parthan
Deputy Director General – Programme Coordination