Cover: With the successful construction of a wind farm at its remote off-grid mine, Diavik is demonstrating its commitment to renewable energy solutions. The wind farm, the first large-scale facility of its kind in Canada’s Northwest Territories, is reducing the mine’s reliance on diesel fuel and is lowering its carbon footprint.
President’s message

Welcome to our 2012 Diavik Diamond Mine sustainable development report. 2012 was a very important year for us at Diavik as we successfully and safety completed our transition to an all underground mine. Diavik is now a proven underground mine.

I am extremely pleased with our work to ensure that our new underground operations will sustain us to 2023 and potentially beyond. By year-end, underground ore production levels were increasing and set us on a strong course, which will see 2013 be our first full year of production from underground.

This accomplishment is the result of the hard work of over 1,000 individuals at Diavik and demonstrates the ability of our dedicated and talented workforce to deliver projects safely and successfully.

Another major 2012 achievement, which I would like to highlight, was the successful construction and commissioning of our wind farm. With this facility, which began delivering power to our mine in September, Diavik is now a global leader in generating renewable energy in extreme cold climates. This accomplishment demonstrates our commitment to innovation, efficiency, and to environmental protection, and proves that renewable energy can work in the remote subarctic. At time of printing, our wind farm had reduced our diesel fuel consumption by over 2 million litres.

These major achievements – indeed all our accomplishments – would not have been possible without the support of our joint venture partners, Rio Tinto and Dominion Diamond Corporation, and our many stakeholders, including communities, governments and business partners.

In closing, Diavik has a bright future and I encourage you to review the pages that follow, which provide additional detail on our operations and the way we operate.

Niels Kristensen
President and Chief Operating Officer
Diavik Diamond Mines Inc.
Diavik Diamond Mine

Located in one of the world’s most challenging environments, on an island in the remote tundra of Canada’s Northwest Territories, the Diavik Diamond Mine is an unincorporated joint venture between Diavik Diamond Mines Inc. and Dominion Diamond Diavik Limited Partnership.

Both companies are headquartered in Yellowknife, Canada. Diavik Diamond Mines Inc. is a wholly-owned subsidiary of Rio Tinto plc of London, England, and Dominion Diamond Diavik Limited Partnership is owned by Dominion Diamond Corporation of Yellowknife, Canada.

In 2012, Diavik completed its transition to an all underground mine. This secures Diavik’s future to 2023 and potentially beyond. Pictured below is the island-based Diavik Diamond Mine.
Introduction

Proud of our legacy to the North

Rio Tinto
Rio Tinto is a leading international mining group headquartered in the United Kingdom. Rio Tinto’s business is finding, mining, and processing mineral resources. Rio Tinto produces minerals – aluminium, copper, diamonds, thermal and metallurgical coal, uranium, gold, industrial minerals (borax, titanium dioxide, salt), and iron ore – which help fulfill vital consumer needs and improve living standards.

From its diverse portfolio, it supplies the metals and minerals that help the world to grow. Rio Tinto’s 71,000 people work in more than 40 countries across six continents. Rio Tinto is strongly represented in Australia and North America, and also has significant businesses in Asia, Europe, Africa, and South America.

Under its group-wide organizational structure, its five product groups, including aluminium, copper, diamonds and minerals, energy and iron ore, are supported by its exploration and technology and innovation groups.

Rio Tinto Diamonds
Rio Tinto Diamonds’ most important values are health and safety, environmental protection, and contributing to the sustainability of local communities. Its operations include 60 per cent ownership of the Diavik mine in Canada, 100 per cent ownership of the Argyle mine in Australia, and 78 per cent ownership of the Murowa mine in Zimbabwe. Rio Tinto Diamonds produces the full spectrum of diamonds, in terms of qualities, sizes, and colours.

Its product represents approximately 15 per cent of the world’s diamonds by volume. The vast majority of diamonds produced are destined for the fine jewellery market. Rio Tinto Diamonds plays a key role in the jewellery industry and has contributed to better practices in governance, environmental, and social performance. In addition to its Mine of Origin Mark program, Rio Tinto Diamonds is a founding member of the Responsible Jewellery Council (RJC), which operates as a not-for-profit organization and draws members from all sections of the diamond and gold supply chain. The RJC provides an industry-wide certification process that aims to reinforce consumer and stakeholder confidence in jewellery products.

Rough diamonds, with a total weight of 60 carats, are among the Diavik Diamond Mine’s 7.2 million carats produced in 2012.

Photo by Dave Brosha/Artwork courtesy GNWT.
Sales and marketing
Rio Tinto Diamonds sells rough diamonds in large volumes to a number of specialist customers. Its relationship with customers is based on mutual understanding and trust, and is long-term. Rio Tinto’s share of the production from its three operating mines is sold through its sales and marketing headquarters office in Antwerp, Belgium, with representative offices in Mumbai, Hong Kong, and New York. Sales of pink polished diamonds are conducted from Perth, in western Australia. Rio Tinto Diamonds’ customers benefit by receiving a regular supply of rough diamonds. Consistency of assortments and allocations tailored to their respective specialization allow customers to develop their own marketing and merchandising activities and help them to grow their downstream business.

Dominion Diamond Corporation
Dominion Diamond Corporation is a Canadian diamond mining company with ownership interests in two of the world’s most valuable diamond mines. Both mines are located in the low political risk environment of the Northwest Territories of Canada. It is the fourth largest diamond producer by value globally and the largest diamond mining company, by market capitalization, listed on the Toronto and New York Stock Exchanges.

Dominion Diamond Corporation operates the Ekati Diamond Mine through its 80 per cent ownership as well as a 58.8 per cent ownership in the surrounding areas containing prospective resources. It also sells diamonds from its 40 per cent ownership in the Diavik Diamond Mine.

Diavik’s northern commitments
Diavik has committed to ensuring local communities benefit from the operation. Commitments are formalized through individual participation agreements with the Tlicho Government, the Yellowknives Dene First Nation, the North Slave Metis Alliance, the Kitikmeot Inuit Association, and the Lutsel K’e Dene First Nation.

Diavik has also signed a socio-economic monitoring agreement with the Government of the Northwest Territories and ratified by local Aboriginal groups.

Regulatory requirements and an environmental agreement between Diavik, Aboriginal groups, and federal and territorial governments formalize Diavik’s environmental protection commitment.

The Environmental Monitoring Advisory Board, created under the environmental agreement, the Diavik Communities Advisory Board, and the individual participation agreements allow communities to monitor Diavik’s operation.

Over its first decade, Diavik has produced over 75 million carats of rough diamonds.
Diavik at a glance

- Transition to all underground mine complete – September 2012
- Wind farm delivers first power to mine – September 2012
- Three ore bodies – A154 South, A154 North, and A418 pipes
- Spending (2000 to 2012) – C $5.7 billion ($4.1 billion northern, of which $2.1 billion is Aboriginal)
- Operations workforce (31 December 2012) – 1,071 (508 northern)
- Total mine life – 16 to 22 years (currently in year 11)
- 2012 rough diamond production – 7.2 million carats
- Reserves – 18.3 million tonnes at 2.9 carats per tonne (December 2012)
- Rough diamond production (2003 to 2012) – approximately 75 million carats
### Key performance indicators

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</thead>
<tbody>
<tr>
<td>Lost time injuries</td>
<td>8</td>
<td>-</td>
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<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>-</td>
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<tr>
<td>Lost time injury frequency rate**</td>
<td>0.55</td>
<td>-</td>
<td>0.85</td>
<td>0.14</td>
<td>0.08</td>
<td>0.14</td>
<td>0.16</td>
<td>0.32</td>
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<tr>
<td>All incident frequency rate**</td>
<td>0.97</td>
<td>0.68</td>
<td>0.28</td>
<td>0.38</td>
<td>0.38</td>
<td>0.65</td>
<td>0.72</td>
<td>0.86</td>
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<tr>
<td>Medical treatments</td>
<td>6</td>
<td>-</td>
<td>8</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>Significant potential incidents</td>
<td>8</td>
<td>-</td>
<td>16</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Health and safety non-compliances</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Environmental regulatory non-</td>
<td>0</td>
<td>0</td>
<td>1***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
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<tr>
<td>compliances</td>
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<td></td>
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<td></td>
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<tr>
<td>Significant environmental incidents</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Environmental management system</td>
<td>Maintain ISO 14001 certification, certified to Rio Tinto HSEQ-MS v2 standard</td>
<td>Maintain ISO 14001 certification, certified to Rio Tinto HSEQ-MS v2 standard</td>
<td>Maintain ISO 14001 certification, certified to Rio Tinto HSEQ-MS v2 standard</td>
<td>Maintain ISO 14001 certification, certify to Rio Tinto HSEQ-MS v1 standard</td>
<td>Maintain ISO 14001 certification, certify to Rio Tinto HSEQ-MS v1 standard</td>
<td>Maintain ISO 14001 certification</td>
<td>Maintain ISO 14001 certification</td>
<td>Maintain ISO 14001 certification</td>
</tr>
<tr>
<td>Fresh water use</td>
<td>0.292 m³ fresh water per tonne of kimberlite</td>
<td>0.47 m³ fresh water per tonne of kimberlite</td>
<td>0.29 m³ fresh water per tonne of kimberlite</td>
<td>0.47 m³ fresh water per tonne of kimberlite</td>
<td>0.54 m³ fresh water per tonne of kimberlite</td>
<td>0.31 m³ fresh water per tonne of kimberlite</td>
<td>0.89 m³ fresh water per tonne of kimberlite</td>
<td>0.7 m³ fresh water per tonne of kimberlite</td>
</tr>
<tr>
<td>Number of external reportable spills/litres per 1,000 litres of mobile diesel consumed</td>
<td>0.271 litres per 1,000 litres of mobile diesel consumed</td>
<td>0.536 litres per 1,000 litres of mobile diesel consumed</td>
<td>0.20 litres per 1,000 litres of mobile diesel consumed</td>
<td>0.536 litres per 1,000 litres of mobile diesel consumed</td>
<td>22 external spills/0.26 litres per 1,000 litres of mobile diesel consumed</td>
<td>0.596 litres per 1,000 litres of mobile diesel consumed</td>
<td>63 reportable spills</td>
<td>4% reduction</td>
</tr>
<tr>
<td>Operations workforce</td>
<td>47% northern</td>
<td>66% northern</td>
<td>56% northern</td>
<td>66% northern</td>
<td>62% northern</td>
<td>66% northern</td>
<td>65% northern</td>
<td>66% northern</td>
</tr>
<tr>
<td></td>
<td>22% Aboriginal</td>
<td>40% Aboriginal</td>
<td>27% Aboriginal</td>
<td>40% Aboriginal</td>
<td>30% Aboriginal</td>
<td>40% Aboriginal</td>
<td>33% Aboriginal</td>
<td>40% Aboriginal</td>
</tr>
<tr>
<td>Northern spending</td>
<td>67%</td>
<td>70%</td>
<td>69%</td>
<td>70%</td>
<td>71%</td>
<td>70%</td>
<td>67%</td>
<td>70%</td>
</tr>
<tr>
<td>Greenhouse gas emissions (+CO₂ equivalent)</td>
<td>184,817</td>
<td>198,832</td>
<td>198,084</td>
<td>214,000</td>
<td>177,274</td>
<td></td>
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<tr>
<td></td>
<td>$161.5 million</td>
<td>$203.0 million</td>
<td>$198.4 million</td>
<td>$193.4 million</td>
<td>Five year targets ended in 2008; new targets are being evaluated</td>
<td></td>
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</tbody>
</table>

* 2012 injury performance measured using all incident frequency only and, as such, lost time and medical treatments targets were not calculated. Significant potential incident performance measured based on closure, not frequency. 2012 significant potential incident closure target and actual were both 100 per cent.

** Lost time injury frequency rate (injuries x 200,000 hours ÷ total hours worked). All incident frequency rate (lost time injuries + medical treatments x 200,000 hours ÷ by hours worked).

*** Elevated zinc measured in seepage from the processed kimberlite containment east dam (August to October).

**** Reduction largely due to proactive implementation of waste rock segregation, which has reduced closure activities and costs.
Underground mining – Diavik’s next phase

In September 2012, with the conclusion of open-pit mining, Diavik safely and successfully completed its transition to an all underground mine.

With its investment in its underground mine, Diavik ensures local training, employment, and business benefits will continue to 2023 and potentially beyond.

The transition began in 2007 when underground mine construction funding was announced by owners Rio Tinto and Dominion Diamond Corporation.

Total investment to construct the underground mine was approximately $800 million. Underground mine construction required several kilometres of tunnels, rescue bays, ventilation and dewatering systems, and maintenance areas. Related surface works included construction of a backfill plant as well as infrastructure to double power generation and water treatment capacity.

During 2012, the ramp up to full production was advancing as planned. At year-end, Diavik’s underground teams were on track and meeting monthly targets in preparation to make 2013 the mine’s first year of full underground production.

Mine life

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</thead>
<tbody>
<tr>
<td>A154 open-pit</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>A418 open-pit</td>
<td></td>
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<td></td>
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<tr>
<td>A154/A418 underground</td>
<td></td>
<td></td>
<td></td>
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</table>

Mine schedule subject to market conditions, further resource evaluation, A21 pipe evaluation, continued mine planning, etc.

Mining methods are sublevel retreat in the A154 South and A418 kimberlite ore bodies and blasthole stoping in the A154 North kimberlite ore body.
For 2012, open-pit work was successfully completed below budget, with teams recovering more ore than planned, and, most important, the work was completed with no lost time injuries or medical treatments.

As part of the transition, Diavik worked with its open-pit mining contractor, Aboriginal-owned I&D Management, to secure future employment for the vast majority of I&D staff.

Diavik’s open-pit mining began in 2003 in the adjacent A154 open pit. The first A418 open-pit ore was mined in 2008. A154 open-pit mining concluded in 2010. Since then, Diavik has mined ore from open-pit and underground operations as it transitioned to a fully underground mine. Diavik will continue to mine all three of the pipes underground.

Mining below the water table presents challenge
At Diavik, water is one of the mine’s biggest challenges.

Inflows occur through natural features which extend from the tunnels up to the lakebed. This water makes its way into the underground mine tunnels and requires a sophisticated pumping system. But to mine below the water table, there is much more involved than simply pumping water.

Before mining begins, development headings, or tunnels, are constructed, which includes using a unique probe drill to locate water. Diavik worked with underground mine heavy equipment manufacturer Atlas Copco to convert a jumbo drill for the work, which includes drilling 26-metre holes into the face of the tunnel. If water is intersected, grout plugs (hollow tubes) are inserted into the holes, and grout, which hardens to cement, seals the inflow.
The next step is to drill and blast 20 metres of tunnel, ensuring a safe six-metre gap between the face and potential water.

These steps make up what is known as development mining and, at Diavik, about one-half the holes drilled underground are for development.

The development work is done approximately 50 metres to 75 metres below mining levels.

Water from underground is pumped to the North Inlet on surface. Volumes are up to 32 million litres per day.

In terms of cost, dewatering represents the largest aspect of underground mining at Diavik.

**Reserves**

Based on year-end 2012 reserves data, total tonnes declined, but Diavik was able to offset a majority of the decline.

In 2012, Diavik mined 2.1 million tonnes of ore, but reserves declined by only 0.6 million tonnes, when compared to a year earlier.

The 2.1 million 2012 ore depletion was offset by 0.8 million tonnes gained from revised modelling and estimation work, 0.5 million tonnes of new reserves added to the A154N kimberlite pipe, and some material mined in 2011, but not actually processed until 2012. Total reserves numbers, reflected in the accompanying table include stockpiled ore which, as of December 31, had been mined but not processed. Diavik reserves include 18.3 million tonnes of ore containing 2.9 carats per tonne.

This compares with 18.9 million tonnes at 3.1 carats per tonne a year earlier. Data from the large diameter reverse circulation (LDRC) drill sample program, conducted on the A418 and A154 North pipes, played a key role in moving resources into reserves. The 2012 A418 kimberlite pipe LDRC program included 10 drill holes, each with a diameter of about 45 centimetres. Drill holes were to depths beyond 400 metres, or about 600 metres below lake level. The program was especially challenging as it was completed concurrent to A418 open-pit mining and needed to be completed prior to the start of underground mining of the A418 kimberlite pipe.

### Proven and probable reserves

<table>
<thead>
<tr>
<th>Pipe</th>
<th>Tonnes (millions)</th>
<th>Carats/tonne</th>
<th>Carats (millions)</th>
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</thead>
<tbody>
<tr>
<td>A154S</td>
<td>2.7</td>
<td>3.8</td>
<td>10.1</td>
</tr>
<tr>
<td>A154N</td>
<td>8.1</td>
<td>2.1</td>
<td>16.8</td>
</tr>
<tr>
<td>A418</td>
<td>7.2</td>
<td>3.6</td>
<td>25.6</td>
</tr>
<tr>
<td>Stockpile</td>
<td>0.3</td>
<td>2.9</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.3</strong></td>
<td><strong>2.9</strong></td>
<td><strong>53.5</strong></td>
</tr>
</tbody>
</table>

Some figures may not add due to rounding.
In 2012, Diavik continued its increased efforts in exploration on the joint venture property. Work during the year focused on a large-scale till sampling program over the eastern half of the property. The challenge of the thick glacial cover continues to be recognized; as a result, a further drill testing program was done. An airborne gravity survey was flown over a cluster of known kimberlites to evaluate its effectiveness. Diavik continues to explore its large claim block in an effort to identify potential new kimberlite targets.

**Winter road successful**

Constructed annually for mine resupply, the Tibbitt to Contwoyto Winter Road is the world’s longest heavy haul ice road, extending 600 kilometres when built into Nunavut. Eighty-seven per cent of the road is constructed over frozen lakes connected by 65 land portages.

Open for approximately 10 weeks each winter, the ice road is a joint venture managed by Diavik Diamond Mines Inc., Dominion Diamond Corporation, and De Beers Canada Inc.

The road opens to light loads and full weight capacity when ice thickness reaches 0.71 metres and 1.04 metres respectively. In 2012, Diavik trucked 3,160 loads (89,000 tonnes) of fuel, cement, explosives, equipment, wind turbine components, and other materials over the winter road.

**Winter road facts**

- First year – 1982
- Busiest year – 2007; total of 10,922 loads (330,002 tonnes) transported by all companies
- Three maintenance camps – Dome, Lockhart and Lac de Gras
- Speed – 25 kilometres per hour for fully loaded trucks on ice
- Distance to Diavik – 366 kilometres

In total, operating diamond mines and other users hauled 6,545 loads (210,000 tonnes) northbound over the 2012 winter road.

Diavik is committed to providing significant training, employment, and business opportunities to the Northwest Territories and the West Kitikmeot region of Nunavut. These commitments have been formalized through the Diavik Socio-Economic Monitoring Agreement concluded in 1999, and in individual Participation Agreements concluded with five Aboriginal groups – the Tlicho Government, the Yellowknives Dene First Nation, the North Slave Metis Alliance, the Kitikmeot Inuit Association, and the Lutsel K’e Dene First Nation.

Each year, Diavik invests over $5 million in local communities through various funding programs.

Diavik has, for over a decade, contributed social and economic benefits to local communities. Since 2000, the company has generated over 7,000 person years of northern employment and spent $4.1 billion with local businesses, or 72 per cent of our total businesses spend of $5.7 billion.

Of the $4.1 billion in northern spend, $2.2 billion has been spent with northern Aboriginal businesses and their joint venture companies.

At 31 December 2012, Diavik employed 508 northerners, of which 238 are Aboriginal peoples.

In 2012, 67 per cent of our spending was with local business, equalling $295 million.
Before mining operations began, Diavik made a formal commitment to employ from eight to 18 apprentices. In 2010, Diavik strengthened this commitment by announcing a goal of 86 new apprenticeship opportunities through 2020. With this additional commitment, Diavik expects to produce over 100 trained northern journeypersons.

Since 2003, 34 apprentices have successfully completed apprenticeships at Diavik and achieved journeyperson certifications from the Government of the Northwest Territories. At year-end 2012, Diavik supported 32 apprentices; all northern and 20 Aboriginal.

Staff with Bouwa Whee, a 100 per cent owned Yellowknives Dene company, which operates Diavik main accommodations complex at the minesite.
### Employment by priority group*

<table>
<thead>
<tr>
<th>Total Aboriginal employment</th>
<th>People</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Participation Agreement Aboriginal**</td>
<td>104</td>
<td>9.7%</td>
</tr>
<tr>
<td>Other northern Aboriginal**</td>
<td>70</td>
<td>6.5%</td>
</tr>
<tr>
<td>Other Canadian Aboriginal</td>
<td>64</td>
<td>6.0%</td>
</tr>
<tr>
<td>Total</td>
<td>238</td>
<td>22.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participation Agreement Aboriginal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tlicho First Nation</td>
</tr>
<tr>
<td>Yellowknives Dene First Nation</td>
</tr>
<tr>
<td>North Slave Metis Alliance</td>
</tr>
<tr>
<td>Lutsel K’e Dene First Nation</td>
</tr>
<tr>
<td>Kitikmeot Inuit Association</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total northern Aboriginal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation Agreement Aboriginal**</td>
</tr>
<tr>
<td>Other northern Aboriginal</td>
</tr>
<tr>
<td>Other Canadian Aboriginal residing in North</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

| Total Aboriginal | 238 | 22.2% |
| Total non-Aboriginal | 649 | 60.6% |
| Total unknown* | 184 | 17.2% |

| Total northern Aboriginal | 206 | 19.2% |
| Total northern non-Aboriginal*** | 302 | 28.2% |
| Northern employees | 508 | 47.4% |

| Total non-northern workforce | 563 | 52.6% |
| TOTAL | 1,071 |

* Declaration is voluntary. Ethnicity of 184 people is not known. This includes 93 individuals who chose not to declare and 91 individuals’ declarations which had not been received at year end. However, northern residency data is known through newly implemented data collection systems.

** Under the SEMA, Aboriginal is defined as First Nations peoples born in the Northwest Territories or West Kitikmeot region; or a descendant of an Aboriginal person born in the Northwest Territories or West Kitikmeot region. Diavik has Participation Agreements with the Tlicho First Nation, Yellowknives Dene First Nation, Lutsel K’e Dene First Nation, North Slave Metis Alliance, and the Kitikmeot Inuit Association.

*** Under the SEMA, northerner is defined as Aboriginal persons and any persons who primarily reside in a self-contained domestic establishment (other than residence at remote work site) in the Northwest Territories or West Kitikmeot region, when not attending an educational institution full-time.

---

### Employment by Community

<table>
<thead>
<tr>
<th>Employment by Community</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellowknife, NT</td>
<td>370</td>
</tr>
<tr>
<td>Hay River, NT</td>
<td>73</td>
</tr>
<tr>
<td>Fort Simpson, NT</td>
<td>4</td>
</tr>
<tr>
<td>Fort Smith, NT</td>
<td>14</td>
</tr>
<tr>
<td>Fort Resolution, NT</td>
<td>3</td>
</tr>
<tr>
<td>Fort Providence, NT</td>
<td>1</td>
</tr>
<tr>
<td>Behchoko, NT</td>
<td>27</td>
</tr>
<tr>
<td>Wha Ti, NT</td>
<td>7</td>
</tr>
<tr>
<td>Gameti, NT</td>
<td>-</td>
</tr>
<tr>
<td>Wekweeti, NT</td>
<td>1</td>
</tr>
<tr>
<td>Lutsel K’e, NT</td>
<td>-</td>
</tr>
<tr>
<td>Kugluktuk, NU</td>
<td>2</td>
</tr>
<tr>
<td>Cambridge Bay, NU</td>
<td>1</td>
</tr>
<tr>
<td>Other northern*</td>
<td>5</td>
</tr>
<tr>
<td>Total northern**</td>
<td>508</td>
</tr>
</tbody>
</table>

* Northern Aboriginal peoples residing outside the Northwest Territories or West Kitikmeot region.

At year-end, Diavik employed, 1,071 people, including underground miner Kris Simon.

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In 2012, Diavik completed its transition to an all underground mine securing its future to 2023 and potentially beyond. Pictured is underground miner Gordon Edwards.
**Economic prosperity**

**Proud of our legacy to the North**

---

Bouwa Whee chefs Chris Dives, Kim Ebert, Jane Balsillie, and Darren Jonasson.

---

### Employment by job classification*

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Northern</th>
<th>Aboriginal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry level</td>
<td>92</td>
<td>79</td>
<td>36</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>156</td>
<td>132</td>
<td>75</td>
</tr>
<tr>
<td>Skilled</td>
<td>667</td>
<td>222</td>
<td>119</td>
</tr>
<tr>
<td>Professional</td>
<td>100</td>
<td>59</td>
<td>8</td>
</tr>
<tr>
<td>Management</td>
<td>16</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,031**</td>
<td>508</td>
<td>238</td>
</tr>
</tbody>
</table>

*Job classification is based on Government of the Northwest Territories definitions. Entry level is defined as having high school graduation or general equivalency diploma with some work experience. Semi-skilled is defined as having high school graduation or general equivalency diploma with minimum of three year’s work experience. Skilled is defined as having college diploma or technical school certification with related experience. Professional is defined as having university degree and related work experience. Management is defined as a having combination of significant work experience at a senior level and a university degree, master’s, or doctorate. For this table, professional includes middle management and management includes senior executives.

**Employment by company**

<table>
<thead>
<tr>
<th>Company</th>
<th>Total</th>
<th>Northern</th>
<th>Aboriginal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diavik Diamond Mines Inc.</td>
<td>680</td>
<td>359</td>
<td>147</td>
</tr>
<tr>
<td>Kitikmeot Cementation Mining</td>
<td>107</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Denesoline Western Explosives</td>
<td>11</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Bouwa Whee Catering</td>
<td>70</td>
<td>55</td>
<td>24</td>
</tr>
<tr>
<td>Tli Cho Logistics</td>
<td>100</td>
<td>68</td>
<td>44</td>
</tr>
<tr>
<td>Other</td>
<td>103</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,071</td>
<td>508</td>
<td>238</td>
</tr>
</tbody>
</table>

**Job classifications for 40 positions undetermined at 31 December 2012.**
Diavik announces new scholarship fund

In February, Diavik, in partnership with the Yellowknife Community Foundation, announced the Diavik Community Scholarship Fund.

With an initial donation of $25,000, this fund will support tertiary education for students from Canada’s Northwest Territories and West Kitikmeot region of Nunavut.

The Diavik Community Scholarship Fund is open to Northwest Territories or West Kitikmeot students, with a priority for Aboriginal students seeking a college diploma, university degree or related trade certification program in the resources industry.

Over the past 10 years of operation, Diavik’s scholarship programs have awarded over $2 million through over 1,400 individual scholarships to residents of the Northwest Territories and Nunavut’s West Kitikmeot region. Scholarships, awarded annually, include those facilitated through the five Aboriginal groups, with whom Diavik has participation agreements, as well as scholarships for Diavik employee family members.

Support for Kimberlite Career and Technical Centre

With its $20,000 donation, Diavik’s total contribution to the Kimberlite Career and Technical Centre (KCTC) in Yellowknife now totals nearly $220,000. Diavik’s contributions, which began in 2004, are used to purchase and maintain equipment and buy materials, primarily for the centre’s welding shop.

Through its programming, KCTC provides students with opportunities to learn about technical and trades career options. Currently, over 450 students are enrolled in KCTC courses, which include construction carpentry, small engine repair, robotics, hairstyling, and welding. Students entering apprenticeships can use KCTC course hours towards their apprenticeship.

In addition to supporting students, the KCTC, in partnership with the Northern Alberta Institute of Technology, has offered the Becoming a Master Instructor program to nine Diavik underground mining trainers.

As part of our continuing commitment to the Yellowknife Community Foundation gala, Diavik commissioned local artist Joe Ashoona to carve a piece of art for auction. The carving, created from diamond-bearing kimberlite from the Diavik Diamond Mine, raised $4,500 for the foundation’s numerous scholarship programs.
Diamond donations
Each year, through our donations committee, Diavik donates polished diamonds to local groups who commit to significantly increase the gem’s value through a fundraising initiative. 2012 marked the third year of a three-year commitment to the Yellowknife Community Foundation gala, which raises funds for local community projects and programs. This commitment includes sponsorship, assistance with planning, donations for auction, and volunteering staff. For the diamond donation, Diavik partnered with Crossworks Manufacturing.

Diavik, in partnership with Crossworks Manufacturing provided a one carat diamond to the Yellowknife Seniors’ Society for their annual fundraising diamond raffle. This is the seventh consecutive year of Diavik sponsorship. During this time, the society has raised over $200,000 through the raffle.

Diavik donated a polished diamond to the NWT Disabilities Council, which used the donation to raise $20,000 through its raffle. The draw was held prior to the council’s Disability Awareness Week event.
Donations and sponsorships
In 2012, Diavik provided over $300,000 to support numerous culture, education, environment, health, recreation, and business development initiatives across communities of the Northwest Territories and West Kitikmeot.

The community donations committee supports local initiatives that promote sustainability and self-sufficiency, and enhance the quality of life for northerners. Comprised of staff from across its operations, the committee reviews all donation requests.

Diavik’s goal is to support requests from the Northwest Territories and Nunavut’s West Kitikmeot region, especially those which focus on youth, elders, Aboriginal culture, community health and wellness, partnering, and capacity building. A listing of various events and organizations supported by Diavik through donations and in-kind contributions in 2012 included:

• Behchoko men/youth annual handgames events
• Cambridge Bay community feast
• Wha Ti community winter carnival
• Food First Foundation
• Hay River women’s hockey tournament
• Hay River Kamba winter carnival
• Kugluktuk community feast
• Mangilaluk School Tukttoyaktuk science fair
• Open Sky Creative Society
• Snowking winter festival
• Women in Action – Cambridge Bay
• Women of Aviation Worldwide Week
• NWT and Nunavut Chamber of Mines Geoscience Forum
• Canadian Championship Dog Derby
• Discover E science camps
• Habitat for Humanity
• Hay River track and field event
• North Slave Metis Alliance Aboriginal Day fish fry
• Ruth Inch Memorial Pool water safety week
• Behchoko Presence Office Christmas events
• Yellowknife Dene First Nation canoe trip
• Kugluktuk summer games
• Yellowknife Dene First Nation – Akaitcho Assembly
• Lutsel K’ee Dene First Nation spiritual gathering
• CIBC Run for Our Lives
• Aboriginal Sport Circle 3rd annual charity golf tournament
• NWT Soccer Association
• Wha Ti women’s volleyball team
• Cambridge Bay Day Care Society
• Stanton Hospital Foundation Festival of Giving
• Tree of Peace
• Yellowknife Food Bank
• Hamlet of Cambridge Bay Christmas hampers
• Hamlet of Fort Providence community feast
• Movember and Sons
• Lutsel K’ee Dene First Nation caribou traditional knowledge
Social well-being

Proud of our legacy to the North

Diavik participated in several community events and meetings in 2012, including (clockwise from top) the Hay River Women’s Hockey Tournament, the Wha Ti spring carnival, a community update meeting in Dettah (Michel Paper, Colleen English, and Chief Ted Tsetta), the North Slave Metis Alliance leadership meeting where Diavik provided a community update, an event in Lutsel K’e (Ray Halwas and Antoine Michel), and sponsorship of the Diavik 150 Canadian Championship Dog Derby in Yellowknife.

At Aurora College’s inaugural northern leadership program ceremony, held at the Legislative Assembly are: front row, Sheldon Henderson (graduate), Melissa Cardinal (graduate), Mona Morrow (Diavik Training Adviser), Chinta Unka (graduate); and, back row, Darren Tuccaro (graduate), Winter Haley (Diavik Business Improvement Specialist), Niels Kristensen (Diavik President), Aaron Norwegian (graduate), and Martin Tanguay (Diavik Executive Human Resources). The college course was based upon Diavik’s program, which is now through the college, available to all northerners.
In an initiative led by Diavik’s Information Systems and Technology department, represented by Leslie Stannard, left, Diavik donated four laptops with software to the Yellowknives Dene First Nation (Wellness Division). The laptops will be used by Believe in Yourself Program students, and for a tutoring program in Dettah and N’dilo. With the computers, Diavik also donated $4,200 for textbooks and reference materials. Jennifer Drygeese, second from left, Wellness Division Director, accepted on behalf of the organization.

The Tibbitt to Contwoyto Winter Road Joint Venture contributed $31,000 to the Convoy for a Cause for Special Olympics NWT through hat and winter road hard cover book sales. The JV and carriers both matched funds. Thanks to Tli Cho Landtran, Tli Cho Logistics, ARS Trucking, Ventures West, RTL, NWT Trucking Association, Weatherby Trucking, North Slave Freighters, and the other road users for donating. Left to right are: Ron Near, Winter Road Director; Lee Martin, Law Enforcement Torch Run Coordinator; John Johannson of North Slave Freighters; Shawn Talbot of Tli Cho Landtran; and Dave Madder, Supervisor of Yellowknife dispatch.

$1,200 was raised at the Diavik yard sale and donated to the Yellowknife Association for Community Living. Matco graciously donated space and manpower for the sale. Items not sold were donated to the Alison McAteer House and the Society of St. Vincent de Paul. Thanks to Marlene Hnatw from our Human Resources Department for coordinating the event, and Martin Tanguay, Robin Wise, Belinda Beck, Iris Hamlyn, Brenda Roberts, and Mona Morrow, who volunteered their time and helped at the sale.

Diavik was among 15 teams participating in the sixth annual Law Enforcement Torch Run for Special Olympics First Air Herc Pull. The event, held at the Yellowknife Airport in September, raised almost $11,000. Thanks to Herc Pull team Diavik volunteers Michael Kant, James Oliver, Mary Cox, Steve Norn, David Sams, James Larocque, Jon Brennan, Barry Ettinger, Evelyn Larocque, Ashley Rivers, Lizi van Wyk, Hayley McLean, Kenna Snow, Heather Noseworthy, and Dayna Meredith.

Each year, Diavik volunteers get grilling at the annual NWT and Nunavut Chamber of Mine’s miners’ picnic. Thanks to German Villegas (pictured right), Peter Lazar (pictured centre), and Kenna Snow, David Wells, Doug Ashbury, Ronna Kingsley, Charlotte Larocque and her son Timothy, Jon Brennan, Deborah Langelier, Tina Nasholm, Richard LeBreton, Dayna Meredith, and Linna O’Hara for volunteering at this great community event.
Mine training society
As Diavik developed operations, it knew that to achieve northern employment commitments it would need access to a significant number of northerners with mining skills. Part of Diavik’s approach was, in 1997, to help create the North’s mine training committee. This committee ultimately served as the model for the Northwest Territories Mine Training Society (MTS), which began its local training initiatives in 2004. Since 2004, MTS has assessed over 1,900 people for training suitability, provided training or other employment-related assistance for over 1,300 people, and has facilitated employment for over 730 people. Employment training programs include underground mining, mineral processing, heavy equipment operations, and environmental monitoring. Diavik supports the MTS and its programs by providing a worksite for the practical training component, program funding, and offering employment to graduates.

Leadership development program
To help increase the number of qualified Aboriginal people at the supervisory and management level, Diavik developed an Aboriginal development program in partnership with SAIT Polytechnic. The program includes DDMI and contractor employees. As well as covering the customized curriculum, which is based on Rio Tinto leadership competencies, participants are matched with a DDMI supervisor for mentoring. Since 2005, 67 individuals have completed the program. All graduates receive a certificate from SAIT recognizing their achievement. In 2010, Diavik expanded the program and two individuals with De Beers Canada, along with four DDMI employees, completed the program. In 2011, the program transitioned to Aurora College. In 2012, six Diavik employees completed the program.

Mining Industry Human Resources Council certifications
Diavik also supports the Mining Industry Human Resources Council’s National Certification Program for Underground Mining and for Mineral Processing. Diavik supported a pilot study in 2011, in which 10 underground miners completed their assessment. In 2012, two Diavik process plant trainers and two Diavik underground trainers completed their qualification to be MiHR Workplace assessors. In late 2012 and early 2013, seven employees completed the mineral processing certification and three completed the underground certification. Diavik will be increasing participation in this program in 2013. The benefit of MiHR certification is that it is a national standardized certification. People completing the program receive a passport that recognizes their skills much like achieving a trades certification.

Diavik selected as a Canada’s Top 100 employer
In 2012, Diavik was selected as a Canada’s Top 100 Employer. This is the second year in a row the company has received this national recognition.

For the competition, the Canada’s Top 100 Employers selection committee evaluated the quality and characteristics of Diavik’s workplace, including:

- Physical workplace
- Work atmosphere
- Health, financial, and family benefits

Mine rescue team competes at international event
The Diavik mine rescue team competed at the 8th International Mine Rescue Competition held in Donetsk, Ukraine, in September. In the rescue event, Diavik finished in third place, with teams from Australia and the Ukraine taking first and second respectively.

The Diavik team was among 26 teams from 13 countries to participate. The international competition includes emergency medical care, apparatus technician, engineering analysis, and performance of rescue action events.

The Diavik mine rescue team is drawn from the Diavik emergency response team, which includes over 60 volunteers from across minesite departments.

Earlier in 2012, the mine rescue team won the 55th annual Workers’ Safety and Compensation Commission’s Mine Rescue Competition.

At this event, team Diavik competed against teams from the North’s diamond mines. In total, the underground competition included seven events, of which Diavik won three.

The team’s next challenge will be the 11th Biennial National Regional Mine Rescue Competition to be held in Fernie, BC, in 2013. Diavik’s mine rescue team has won this event’s overall underground competition twice in a row.

Diavik’s mine rescue team won third place at the 8th International Mine Rescue Competition. Pictured is the team performing a simulated rescue of an injured miner.
Fish and water traditional knowledge

As part of its 2012 aquatic effects monitoring program, Diavik, partnering with local communities, conducted a traditional knowledge program. The program was conducted from a seasonal camp on the south side of Lac de Gras. The focus of the program was fish and water health in the lake, particularly in areas close to the mine.

This program was developed based on direction from traditional knowledge holders from each of the five Aboriginal organizations that are a part of the environmental agreement. A series of planning meetings were held in the communities during 2011 and 2012 to determine how best to conduct the camp.

During the planning sessions, community representatives explained that traditional knowledge is best captured and shared through video rather than written reports. A small camera crew was hired to conduct a training session for youth from the communities so they could assist with filming and recording the camp activities while learning from their elders.

Camp participants noted the importance of traditional knowledge context and sharing process, which is situated in, and interconnected with, spirituality, codes of conduct, and connection to the land, animals, and ancestors. Customs, practices, and stories about the journey-based creation of unique landscape features underscore this context of traditional knowledge.

Overall, camp participants described the status of the fish and water in Lac de Gras near the Diavik mine as good. Two fish were identified as being of poorer condition, noting that the fish were skinny and, in the case of one, had a larger head. Another fish was also observed as having some intestinal worms and being of poorer condition. Participants noted that this tends to occur in all fish populations and that the fish are not eaten. Those that were tasted as part of the palatability study resulted in scores of 1 (excellent for eating, looks better than fish usually caught) or 2 (good for eating, looks similar to fish usually caught) from all participants.
Camp participants noted the environmental indicators that they use to assess water quality, such as condition of the shoreline and clarity of the water. Additionally, a tea test was used to assess water quality and participants noted that tea made from water of a poor quality results in film or scum on the surface of the cup. None of the water samples from Lac de Gras had this scum or film and all the samples tasted acceptable to participants.

A final report titled, “At Night We Slept on Diamonds” and a documentary film titled, “5 Days, 2 Ways, 1 Camp” were produced to capture the results of this program.

Elders tasted four fish that they baked, boiled, fried, and grilled. There were mostly positive descriptions based on the taste test of each fish. The adjectives used repeatedly to describe the fish included good, nice, great, fatty, good flavour and texture, normal, beautiful, fresh, and tasty.

Similarly, camp participants used indicators grounded in traditional knowledge to evaluate water quality. From this holistic, interconnected perspective, camp participants deduced that water quality is good. Water quality results from scientific results and traditional knowledge support the same general conclusion that the water is still good in Lac de Gras.

Environmental compliance
As part of its commitment to the environment, Diavik is a signatory to the environmental agreement with local Aboriginal groups, and the federal and territorial governments. Finalized in March 2000, the agreement formalizes Diavik’s environmental protection commitments, establishes reclamation security requirements, and provides transparency and oversight to local communities.

Regulatory requirements are governed by a variety of environmental acts and regulations that set specific conditions through various permits, licences, and authorizations as well as the environmental agreement.

For example, the water licence establishes effluent criteria for waste water discharge to protect the water.

Fish and fish habitat are protected, monitored, and managed in accordance with the requirements of fisheries authorizations.

Land leases outline the requirements for responsible land management practices, including provisions for infrastructure and waste and hazardous materials management.

The public can view these various documents at a public library in the Environmental Monitoring Advisory Board’s office in Yellowknife and/or through the Wek’eezhii Land and Water Board (WLWB) public registry (online and library).

Inspection and enforcement
Government inspections provide assurances that Diavik remains in environmental compliance. In 2012, regular inspections were conducted by the federal Department of Aboriginal Affairs and Northern Development Canada (AANDC), which holds primary responsibility for enforcement and inspection of the legal provisions of permits and licences related to land and water use and waste management. AANDC conducted six inspections of the Diavik Diamond Mine in 2012. Inspection reports are included in the Wek’eezhii Land and Water Board online registry that can be sourced from their web site (http://wlwb.ca/).
Environmental management system
To manage its environmental protection commitments, Diavik has implemented an internationally certified Environmental Management System (EMS) that:
• identifies and prioritizes environmental risks
• identifies activities to protect the environment
• ensures employees are properly trained
• anticipates and avoids environmental problems
• ensures regulatory compliance and due diligence
• ensures consistency with corporate environmental policy

Certified under the internationally acknowledged ISO14001 standard, Diavik's EMS is designed to be simple, understandable, easy to implement, and adaptable. Diavik's EMS includes protection for wildlife, water, and fish habitat – issues of particular concern raised by local communities. In 2010, Diavik was certified to a new integrated Rio Tinto management system for health, safety, environment, and quality (HSEQ). HSEQ is aligned with ISO 14001 (certification will be maintained) and Rio Tinto standards, procedures, and work practices that are applied at Rio Tinto operations globally.

Caribou
Caribou are a key indicator species because of its cultural and economic value to northern residents as well as being of ecological importance.

For this reason, Diavik works to regularly review its current wildlife monitoring methods. Recommendations on how to proceed with caribou monitoring emphasized a change in monitoring objectives that could be addressed through the use of similar methods at a reduced frequency.

Plans for 2013 caribou monitoring at Diavik are focused toward on-the-ground behavioral observations at various distances from the mine and aerial surveys in conjunction with the Ekati Diamond Mine. Site-based monitoring and mitigation measures, such as road surveys and employee notifications, will remain the same for 2013 to address any potential issues that may occur due to caribou presence at the minesite.

Wildlife monitoring
Diavik monitors the potential effects of the mine on wildlife and wildlife habitat. Monitoring is done to help Diavik determine if the predictions made in its environmental assessment are accurate and to help assess the effectiveness of mitigation strategies. Currently, Diavik conducts caribou, raptor, wolverine, grizzly bear, and other wildlife monitoring programs.

ISO 14001 certification
Under the International Organization for Standardization (ISO) requirements, Diavik's environmental management system is audited annually to make sure it is current and effective. Diavik first achieved ISO 14001:1996 accreditation in 2005, completed recertification to the newer ISO 14001:2004 standard later that year, and maintains certification. Diavik's ISO certification demonstrates it has a comprehensive system that passes a global standard established by experts. Under ISO, companies are audited regularly and must recertify.
Wind farm delivers power

Diavik operates the world’s most northern large-scale wind-diesel hybrid power facility.

The wind farm, which began delivering power to the mine’s grid on 28 September 2012, is projected to lower the mine’s annual power-related diesel fuel consumption by 10 per cent and reduce its carbon footprint by six per cent.

Over its first winter of operations, one of the coldest on record, the wind farm had reduced fuel consumption by 1.8 million litres. For winter 2012/13, or the first eight months of operations, the wind farm reduced Diavik’s CO₂ emissions by 5,022 tonnes.

The extreme location of the mine meant a highly innovative design was needed for the turbines, in order to maximize their output in the harsh subarctic climate.

With temperatures in the winter as low as -40°C, the blades are all fitted with de-icing technology, and represent a new benchmark for wind power in low temperatures.

The project received capital approval in 2011 and, in 2012, all the wind farm components were transported over the winter road. Sixty loads were needed, including the 33-metre epoxy resin blades (6.5 tonnes each), which were the longest loads ever hauled over the road. Customized trailers were required to ensure the turbine components could successfully navigate the winter road’s 65 portages.

A key part of the early work was Diavik’s renewable energy feasibility study, which began in 2007 with the installation of a meteorological tower to collect weather data at the minesite. The three-year study confirmed Diavik had a strong wind resource.

In 2011, with the study complete, Diavik donated the tower to a local Aboriginal partnership studying the wind resource potential at the old Giant Mine in Yellowknife.

As with the weather tower, Diavik is optimistic that the experience and knowledge gained through the planning.

### Wind farm facts

**Environmental**
- Approximately five million litre reduction in use of diesel per year (100 fuel tanker truckloads)
- Projected 12,000 tonnes reduction in CO₂ per year
- Projected six per cent reduction in GHG per year

**Technical**
- Four Enercon E70 generators
- Average power penetration of seven per cent
- Maximum power penetration of 45 per cent
- Gearless direct-drive design operates to -40°C
- Installed and demonstrated capacity of 9.2 megawatts
- 17 gigawatt hours of annual power production
- Eight year estimated payback

**Dimensions**
- Tower hub height: 64 metres
- Turbine rotor diameter: 71 metres
- Total turbine height: 100 metres

One of four of Diavik’s 2.3 megawatt wind turbines.
Diavik’s wind farm is projected to lower its diesel usage for power by 10 per cent and its carbon footprint by six per cent.

development, construction, and operation of its wind farm will be able to be shared so that other projects can be developed in the future.

To learn more about Diavik’s wind farm, see the quick links section on the diavik.ca web site home page, which includes a video on the project.

Water recycling
Over the past several years, Diavik has significantly increased the amount of water it recycles.

As a result, the amount of water it draws from Lac de Gras has decreased significantly.

In 2012, Diavik recycled 5.8 million litres of water; a ten per cent increase over the previous year and well above the 2.3 million litres recycled in 2009.

As a result, last year, Diavik used just 47 per cent of its allowable type A water licence limit (see table page 26).

Water monitoring
Diavik’s water quality monitoring system includes a surveillance network program for monitoring water in and around the minesite, and an aquatic effects monitoring program, which measures changes in the Lac de Gras aquatic environment.

Results from water quality monitoring programs are collated and reviewed to identify the need for any follow-up action.

Under its comprehensive monitoring program, thousands of water samples are collected and analyzed every year to ensure Lac de Gras is being protected.
Diavik has never exceeded its regulated water volume and details are reported to regulators monthly and summarized in an annual water licence report.

Key to the recycled water increase was the 2010 commissioning of a pipeline connecting the North Inlet and its ore processing plant. Water is then drawn from the North Inlet, part of the mine’s water management system, instead of directly from Lac de Gras. Previously, only water from the processed kimberlite containment area was recycled back through the process plant.

Water directed to the North Inlet includes runoff, seepage through the dikes, mine water from the open pits, and underground mine water.

Diavik releases only treated water and this is through the North Inlet water treatment plant.

**Environmental Monitoring Advisory Board**

In March 2000, the environmental agreement (EA) was signed by Diavik Diamond Mines Inc., the Tlicho Government, the Yellowknives Dene First Nation, the Lutsel K’ee Dene First Nation, the Kitikmeot Inuit Association, the North Slave Metis Alliance, the Government of the Northwest Territories (GNWT), and the Department of Indian Affairs and Northern Development (AANDC). Through the EA, the Environmental Monitoring Advisory Board (EMAB) was established as a not-for-profit organization that works independently and at arm’s length from Diavik and the other parties to the EA.

EMAB’s mandate is to assist with the implementation of the environmental agreement. EMAB also serves as an external reviewer of our environmental performance.

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**Water usage**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Fresh water used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh water for plant</td>
<td>432,944</td>
<td>506,195</td>
<td>957,116</td>
<td>1,217,185</td>
<td>1,174,754</td>
<td>914,947</td>
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<tr>
<td>Potable water</td>
<td>74,938</td>
<td>82,399</td>
<td>68,127</td>
<td>65,781</td>
<td>101,704</td>
<td>98,444</td>
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<tr>
<td>Dust management</td>
<td>94,635</td>
<td>49,672</td>
<td>101,665</td>
<td>59,356</td>
<td>118,114</td>
<td>78,940</td>
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<td>Fresh water, other</td>
<td>0</td>
<td>199</td>
<td>2,097</td>
<td>2,579</td>
<td>8,545</td>
<td>4,880</td>
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<td>Total*</td>
<td>602,517</td>
<td>638,465</td>
<td>1,129,005</td>
<td>1,344,901</td>
<td>1,403,117</td>
<td>1,097,211</td>
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<tr>
<td>Open Pit Dewatering</td>
<td></td>
<td></td>
<td></td>
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<td>Pit water</td>
<td>151,861</td>
<td>96,410</td>
<td>1,380,032</td>
<td>5,989,059</td>
<td>6,146,315</td>
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<tr>
<td>Seepage wells</td>
<td>Data Not Available</td>
<td>Data Not Available</td>
<td>Data Not Available</td>
<td>65,861</td>
<td>212,069</td>
<td>154,098</td>
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<tr>
<td>Total</td>
<td>151,861</td>
<td>96,410</td>
<td>1,380,032</td>
<td>6,054,920</td>
<td>6,358,384</td>
<td>6,560,647</td>
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<tr>
<td>Effluent discharged to Lac de Gras</td>
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<tr>
<td>Collection ponds to Lac de Gras (clean water)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>218,213</td>
<td>0</td>
<td>1,542,425</td>
</tr>
<tr>
<td>North Inlet to Lac de Gras (water treated through North Inlet Water Treatment Plant)</td>
<td>11,905,009</td>
<td>12,490,689</td>
<td>12,951,724</td>
<td>10,990,705</td>
<td>8,196,373</td>
<td>7,661,542</td>
</tr>
<tr>
<td>Total</td>
<td>11,905,009</td>
<td>12,490,689</td>
<td>12,951,724</td>
<td>11,208,917</td>
<td>8,196,373</td>
<td>9,203,967</td>
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<tr>
<td>Recycled/reused water within plant</td>
<td></td>
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<tr>
<td>Recycled processed kimberlite containment water</td>
<td>3,470,054</td>
<td>3,716,395</td>
<td>2,168,532</td>
<td>1,558,243</td>
<td>2,426,274</td>
<td>2,355,786</td>
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<tr>
<td>Recycled North Inlet water</td>
<td>1,709,906</td>
<td>1,206,177</td>
<td>1,025,178</td>
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<tr>
<td>Treated sewage</td>
<td>72,785</td>
<td>71,578</td>
<td>64,485</td>
<td>63,180</td>
<td>90,812</td>
<td>78,010</td>
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<tr>
<td>Collection ponds to processed kimberlite containment (silty water)</td>
<td>509,663</td>
<td>304,251</td>
<td>322,049</td>
<td>724,803</td>
<td>750,823</td>
<td>537,415</td>
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<tr>
<td>Total*</td>
<td>5,762,408</td>
<td>5,298,401</td>
<td>3,580,244</td>
<td>2,346,226</td>
<td>3,267,909</td>
<td>2,971,211</td>
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* See related water recycling text
Fuel consumption

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</thead>
<tbody>
<tr>
<td>Mining</td>
<td>13,023,945</td>
<td>17,568,558</td>
<td>24,035,288</td>
<td>21,480,972</td>
<td>23,702,128</td>
<td>25,143,112</td>
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<tr>
<td>Boiler</td>
<td>9,853,483</td>
<td>12,574,541</td>
<td>10,158,733</td>
<td>4,953,313</td>
<td>3,346,260</td>
<td>2,045,924</td>
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<tr>
<td>Electricity*</td>
<td>41,401,957</td>
<td>38,416,210</td>
<td>33,314,930</td>
<td>22,439,133</td>
<td>22,877,880</td>
<td>25,364,604</td>
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<tr>
<td>Capital expenditures**</td>
<td>333,436</td>
<td>872,250</td>
<td>1,489,797</td>
<td>12,841,125</td>
<td>23,522,738</td>
<td>19,261,924</td>
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<tr>
<td>Total</td>
<td>64,612,821</td>
<td>69,431,559</td>
<td>68,998,748</td>
<td>61,714,542</td>
<td>73,449,006</td>
<td>71,815,564</td>
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</tbody>
</table>

* Does not include fuel consumed for capital expenditures (construction) projects electricity.
** Construction and underground mine development.

Fuel

Diesel fuel and its wind farm provide the mine's electrical power needs. Diesel is also required for mobile equipment. With access to site limited to the seasonal winter road from Yellowknife, fuel storage must be of sufficient capacity to supply one year of operations.

Closure planning

As a requirement of Diavik's Type A water licence and land leases, an Interim Closure and Reclamation Plan is reviewed and revised regularly to reflect ongoing alterations or changes related to the mine plan and potential environmental challenges identified in the course of mining.

In 2012, Diavik continued to work with communities, regulators, and other stakeholders to update the plan. In 2012, Diavik submitted the first annual closure update report. The document highlights progressive reclamation that has been completed to date, and studies related to closure planning.

Reporting

In relation to fuel and energy, Diavik follows a stringent suite of reporting requirements. These include:

- monthly Surveillance Network Program reporting to the Wek’eezhii Land and Water Board
- daily and monthly fuel and energy reporting to mine management
- semi-annual fuel and energy reports to Rio Tinto
- reporting annually to the National Pollutant Release Inventory available on Environment Canada's web site
- reporting to Environment Canada's GHG Emissions Reporting Program

The annual Diavik environmental agreement report includes a summary of fuel and energy reduction initiatives. Rio Tinto reports group energy use and targets on its web site.

Verification activities

<table>
<thead>
<tr>
<th>Area</th>
<th>External</th>
<th>Rio Tinto</th>
<th>Internal</th>
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<tbody>
<tr>
<td>Environment</td>
<td>Environmental monitoring advisory board</td>
<td>Independent technical audits, plus Rio Tinto environmental</td>
<td>Environmental management system audits</td>
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<tr>
<td></td>
<td>Inspections by government regulators and inspectors</td>
<td>standards review</td>
<td>Facility inspections</td>
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<tr>
<td></td>
<td>Facility inspections</td>
<td></td>
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<tr>
<td>Social</td>
<td>Health and safety audits by government regulators</td>
<td>Annual health and safety management audits against Rio</td>
<td>Workplace health and safety audits</td>
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<tr>
<td></td>
<td>and inspectors</td>
<td>Tinto safety standards</td>
<td>Workplace safety interactions</td>
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<tr>
<td></td>
<td>Socio-economic monitoring advisory board monthly</td>
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<td>Human resource system audits</td>
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<tr>
<td></td>
<td>review</td>
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<tr>
<td></td>
<td>Participation implementation committee performance</td>
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<tr>
<td>Economic</td>
<td>Socio-economic monitoring advisory board</td>
<td>Best-practice audits</td>
<td>Financial audits</td>
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<td></td>
<td>Independent financial audits</td>
<td>Annual review</td>
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</tr>
<tr>
<td></td>
<td>Audits by government regulators</td>
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</table>
### Environmental monitoring programs

<table>
<thead>
<tr>
<th>Purpose of monitoring</th>
<th>Key activities</th>
</tr>
</thead>
</table>
| Dust monitoring       | Determine if environmental assessment predictions are accurate.  
                        | - Ongoing notification to operations for dust suppression  
                        | - Summer and winter dust sampling to determine extent of dust dispersion related to operations activities  
                        | - Dust suppressant used on airport apron, taxi-way, helipad, and parking lot  
                        | - Air quality modelling |
| Meteorological        | Measure/detect meteorological trends. Determine influences on site water balance.  
                        | - Provide design and construction information to operations.  
                        | Measured:  
                        | - horizontal wind speed and direction, and standard deviation of horizontal wind direction  
                        | - ambient temperature  
                        | - relative humidity  
                        | - precipitation – rain and snow  
                        | - incoming solar radiation  
                        | - evaporation rates |
| Water quality         | Measure levels, limits, and sources of water use, as established in water licence.  
                        | - All water used for consumption and operations is metered  
                        | - PKC facility levels monitored  
                        | - All make-up water measured  
                        | - Completed an updated minesite water balance |
| Water quality compliance | Monitor effluent limits as required by water licence.  
                        | - Samples collected and analyzed in compliance with the water licence at required SNP locations |
| Aquatic effects       | Collection of information to determine the short and long-term effects in the aquatic environment resulting from the project.  
                        | - Samples collected at AEMP sites for water quality, phytoplankton, zooplankton, benthic invertebrates, sediment chemistry, and fish health |
| Wildlife              | Determine if predictions in environmental assessment are accurate.  
                        | - Assess the effectiveness of mitigation strategies.  
                        | - Caribou monitoring for:  
                        | 1. numbers on island  
                        | 2. mitigation effectiveness  
                        | 3. zone of influence  
                        | - Raptor and waterfowl monitoring  
                        | - Wolverine track and hair snagging surveys for presence  
                        | - Effectiveness of carnivore mitigation  
                        | - Track incidental sightings of most species at the minesite |
| Wildlife habitat (vegetation loss) | Determine if environmental assessment predictions (linked to wildlife program) are accurate.  
                        | - Determine extent of vegetation/habitat loss.  
                        | - Survey extent of mine footprint related to vegetation loss  
                        | - Vegetation plots are surveyed every second year for changes in plant species population and density |
| Fisheries             | Fisheries authorization requirements.  
                        | Initiate long-term monitoring programs.  
                        | - Slimy sculpin and lake trout studies to determine metal concentrations in fish tissue  
                        | - Traditional knowledge monitoring program relating to fish palatability |
| Reclamation research  | To establish research programs related to reclamation research.  
                        | Information gathered from these programs will be used for closure.  
                        | - Will need to assess additional research needs relating to vegetation and closure  
                        | - The test piles research monitoring and maintenance continued in 2010. Instruments installed in the core of the piles were sampled regularly through the 2010 field season.  
                        | - Data from 2007 through 2010 provide initial response data. Field data collected over successive field seasons will help evaluate how the physical conditions and acid rock drainage evolve over time. All collected data will be used for thermal, hydrologic, and geochemistry modelling.  
                        | Re-vegetation test plots  
                        | Country rock test piles |