



#### **2018 SUSTAINABILITY AWARD WINNERS**

# **Champion for Sustainability**

Diversity Food Services, Winnipeg

Diversity Food Services is a joint venture of the University of Winnipeg's Community Renewal Corporation and Supporting Employment and Economic Development (SEED) Winnipeg to deliver excellent food services to the University of Winnipeg, Fort Whyte and the Player's Golf Course, while providing meaningful employment and ownership opportunities for the community. Diversity is a social enterprise designed around four pillars of sustainability: cultural vitality, economic health, environmental responsibility and social equity.

In 2017, 67 per cent of purchases were 'sustainably' sourced or purchased from local suppliers within 100 kilometres of the University of Winnipeg. All food waste from Diversity's university kitchens and cafeterias is composted. Diversity does the majority of its own butchery, ordering in whole animals from local producers. All kitchen cooking oils are collected and converted to bio-fuel. Food that would otherwise be wasted is donated to local food banks.

#### **Honourable Mention**

Randy Proven, Winnipeg (posthumously)

Randy Proven was a champion in the sustainable building industry before the term existed. He leaves a legacy of high-performance, energy-efficient homes across Manitoba. He built, retrofitted or helped design over 24 buildings in Onanole, Minnedosa, Plumas, East Selkirk, Clandeboye, Lockport, Gimli and Winnipeg. He was always striving to improve the energy and resource efficiency, performance and durability of buildings. He was a strong advocate for changes to building codes in order to improve building performance and was constantly writing to decision makers about climate change, reducing greenhouse gases, energy-efficient buildings and Passive House. Sadly, he passed away suddenly on Nov. 28, 2018.

### **Outstanding Achievement**

Assiniboine Park Conservancy (APC), Winnipeg

Since the APC began its redevelopment of the park and zoo in 2009, sustainability has been at the forefront of many decisions, and continues to be applied throughout the zoo and park. Its sustainability strategy goals will assist in the collective fight against climate change, reduce greenhouse-gas emissions and contribute to creating green jobs. As a result of APC's sustainability strategy, it is actively contributing to a better Manitoba and reducing its ecological footprint.

The APC makes an active effort to educate families and school groups about the importance of sustainable actions. It also focuses on waste reduction, community engagement, water stewardship and energy efficiency throughout its educational programs.

#### **Education for Sustainability**

William L. Taylor, Cranberry Portage

William Taylor has been a teacher in northern Manitoba since 1989. Over the course of his career, he has led his students on a number of environmental and social initiatives including the collection and recycling of 40,000 aluminum cans from the community of Wasagamack, and helping fellow teachers learn about and implement waste reduction and energy conservation practices at Charles Sinclair High School in Fisher River Cree Nation. He is presently a high school teacher at the Frontier Collegiate Campus in Cranberry Portage.

## **Sustainability in Pollution Prevention**

Rural Municipality (RM) of Louise Waste Management Facility

The RM of Louise, along with the towns of Pilot Mound and Crystal City, have incorporated a number of system upgrades at their waste facility site to increase the amount of waste diverted from the landfill by increasing the amount of recyclables being removed from the waste stream. Household waste has been reduced by 20 per cent with the enhanced sorting of recyclables, metals and wood burnable material. Additionally, they are able to compost more of the materials they receive. It is estimated this system has increased the life of their landfill site to 70 years from 35 years, should volumes stay at the present rate.

# **Sustainable Community**

Fisher River Cree Nation

Fisher River Cree Nation (FRCN) serves as a model for sustainable development. FRCN has the largest solar farm in Manitoba, and will generate 1.45 gigawatt hours per year, which is enough to power 350 to 400 homes. It contains over 2,900 Heliene Tier 1 solar panels, which were made in Canada. Nine community members were employed and trained in the construction of the solar farm. FRCN has more homes powered by geothermal than any other community in the province. Half of the homes on the reserve are now powered by geothermal energy, as is the school, laundromat and fitness centre. FRCN was one of the first two communities in Manitoba to install geothermal heating and cooling systems in 2013 through an innovative social enterprise program. The program created jobs in the community and saved families more than \$1,000 a year on their energy bills. It has all but eliminated the FRCN's reliance upon burning wood to heat homes, protecting nearby forests and drastically reducing carbon emissions. FRCN devoted more than a dozen years to establish Fisher Bay Provincial Park. The 84,150 hectare, non-operational park is comprised of lands adjacent to Fisher Bay, island areas including Moose, Little Moose and Tamarack islands, and the beds of Fisher Bay and Lake Winnipeg.

#### **Honourable Mention**

City of Dauphin

The City of Dauphin has committed to becoming a leader in sustainability with two consecutive mayors making the environment and sustainability a central theme for the community's growth.

The City of Dauphin has engaged in a number of initiatives:

- Partnered with Dauphin Neighbourhood Renewal on a large-scale rainwater catchment system, reducing the amount of treated water used to water flower baskets and community gardens. The cost of this system will be recovered within five years with the savings in treated water costs.
- Entered into a contract with PureSphera for the collection of whitegoods (household appliance) for recycling.
- Evaluated and prioritized repairs to reduce the amount of infiltration and inflow into the city's sanitary system.
- Conducted a building performance optimization evaluation at Credit Union Place, the city's
  recreational facility. The operation of the chillers, ice plants and all of the mechanical
  systems were assessed and 14 recommendations were made to optimize energy
  performance of these systems. Work on implementing these recommendations is
  underway and will save Credit Union Place operational costs as well as energy costs while
  preventing catastrophic failures.

### Action on Climate Change, Air Quality and Energy Efficiency

Prairie Architects - Design of Building Blocks on Balmoral at Great West Life

Building Blocks on Balmoral at Great-West Life, is a testament to adaptive re-use, taking a century old building and transforming it into a leading example of sustainability. The restored, historic William E. Milner House now sits proudly at the heart of a modern and vibrant child-care facility in the West Broadway neighborhood of Winnipeg.

Project design highlights include:

- Received LEED Platinum certification for a geothermal ground source heat-pump system
  with in-floor radiant heating and passive chilled beams for cooling, an exhaust air heat
  recovery, displacement ventilation translating to lower fan power and optimal fresh air
  delivery, and reduced lighting power densities.
- The contractor and design team diverted almost 90 per cent of construction waste from the landfill for reuse, recycle or repurposing. Over 13 per cent of new materials including flooring, insulation, concrete, rebar and even landscaping materials contained recycled content.

• By reusing many structural and non-structural components, over 36 per cent of new and existing materials were extracted and manufactured within an 800-kilometre radius of the project site (or transported by rail within a 2,400-km radius).

### Innovation for Sustainability

Dr. Doug Cattani, Winnipeg

Dr. Doug Cattani has engaged in developing major research advancements on intermediate wheatgrass, which is a sod-forming perennial grass. Since 2010, Cattani has been a leader in a collaborative international project known as Kernza that involves scientists and specialists from state and provincial government agricultural agencies, the Land Institute based in Kansas and scientists from around the world. Its mission is to apply non-genetically modified organism (GMO) selection and inter-mating techniques to increase yield and disease resistance in perennial crops and to create perennial versions of annual crops.

The root depth will sequester more carbon than a traditional crop. It will also reduce greenhouse-gas emissions because perennial crops do not require annual seeding. The project will reduce fertilizer application and run-off, reducing the contamination of the freshwater and marine ecosystems. Producing a dense crop canopy minimizes the need for tillage (less soil disturbance = less erosion) and less herbicide applications (less run-off) and providing a strong food nutritional profile (higher protein level relative to conventional wheat).