



PARTNERSHIP OF THE
Manitoba Capital Region

FROM WASTE TO RESOURCE

An Integrated Approach

January 28, 2016

SUMMARY FINDINGS

REPORT

From Waste to Resource: An Integrated Approach (#W2R) was held at the Metropolitan Entertainment Centre on January 28, 2016.

Capital Region leaders recognized the need for new and innovative ways to manage waste and hosted a delegation from the Netherlands led by the Consul General, Mr. Anne van Leeuwen. During the three-days of discussions, a one-day interactive workshop featured experts on global best practice who presented to over 200 participants from universities, governments, business and industry as well as waste management experts.

Speakers:

Colleen Sklar, Executive Director - Partnership of the Manitoba Capital Region
Mayor Brian Bowman, Mayor of Winnipeg
Mr. Anne van Leeuwen, Consul General of the Netherlands
Hank Venema, International Institute for Sustainable Development
Warren Thompson, Stantec Team
Ruud Cino, Ministry of Infrastructure and the Environment of the Netherlands
Herman Huisman, Rijkswaterstaat
Hans van Duijne, Deltares
Brendo Meulman, DeSaH
Yvo Veenis, Groundwater Technology
Mark Vanderbeken, DRYCAKE
Sepideh Datoobar, eurete

Experts in water and waste management along with government officials from the Netherlands, such as Ruud Cino from the Ministry of Infrastructure and the Environment, had the opportunity to review the Manitoba context, discuss mechanisms for better collaboration between knowledge institutions, local government, business and industry as well as introduced new and innovative practices being undertaken globally. Integrated process have been introduced and adopted successfully across the globe, many introduced by experts from the Netherlands.

The #W2R workshop was an opportunity for in-depth conversations with national and international industry experts who provided input to regional leaders as they created a vision and long-term strategy.

In this report, findings are presented from data collected by University of Manitoba, Department of City Planning facilitators who engaged the participants on their perception of current collaboration level between knowledge institutes, governments and business and industry in the Capital Region. Moreover, they gathered suggestions on how to better improve that collaboration. As well as the top ideas, strategies and actions were discussed in a rapid-fire setting and the responses will help form our path toward best practice toward an integrated approach for managing waste in the Capital Region.

Participants were asked "What are three words you would use to describe our Capital Region TODAY from a Waste to Resource (management) Perspective?"



Lunch Session – Question 1

What are the benefits of collaboration between knowledge institutes, governments and business (KGB)? What are the barriers to greater collaboration in the Capital region between the KGB and across sectors?

BENEFITS		BARRIERS	
partnerships & networking	3	politics/political will	11
relationship building	5	cost/funding	6
public participation/political will	4	fragmentation	5
information/perspective exchange	7	lack of education/understanding	4
asset management	5	separate goals/narrow thinking/self-interest	8
innovation	7	organization/logistics/time	6
big picture thinking/common goals	6	representation/leadership	2
economic growth & development	4	complacency/risk aversion	3
higher efficiency	1	regulation & enforcement	1
better accessibility/sustainability	2		
regulation and enforcement	1		

Lunch Session – Question 2

Opportunities: Thinking about the Capital Region, what are some ideas for creating greater collaboration?

municipalities working together (regional planning)	10
Partnership regulations (policy across levels of gov/RM's)	8
shared equipment resource/information/knowledge	7
open-discussion (W2R-style events)	5
showcase successes	5
start small then build momentum (low hanging fruit)	4
localizing responsibility	4
develop risk culture (fail fast and fail cheap)	3
industry responsibility	3
change mentalities (public, private, government officials)	3
better technology (technology transfer)	2
well defined leadership	2
more funding to PMCR	2
education (getting the message out)	2
best practice research	2
better incentives to innovate and collaborate (NL model)	2
Living lab to build and test new companies	1
task force for consistent focus on issues	1
get down to the details	1
use what has been proven to work	1
idea generation first and foremost	1
create crisis	1
create a 'single language' manual	1
fairness	1
a 'water board'	1

WRAP-UP DISCUSSION

The top ideas, strategies and actions for designing an integrated approach to waste management in the Capital Region are:

- Changing the mindset – waste isn't waste it's a resource
- Establishing realistic targets and timeframes
- Generally both regulation and incentivize
- Integrated planning process with stakeholders
- Planning incentives for separating waste
- Set local markets
- Proximity and locations of transfer stations
- Too many landfills – The PMCR should be looking at reducing numbers – small landfills
- Eliminating miscommunication between the province and all the different sectors
- Getting the public to buy in and educating children
- Paying or employing people for waste separation
- Instead of carbon market/tax have phosphorus market/tax
- Provincial funding
- North east Capital Region needs processing or multi-material recycling center – so much bulky waste in ditches and Red River
- Geese biological hazard acute chronic – flight danger with small airports
- Plastic water bottles are a major litter issue
- The Forks, Assiniboine Conservatory Ect. can use those underground bins
- Educational incentives – need to match that the public wants to do “the right thing”
- Generational ethics – public perception
- Reliable and useful data collection to measure so the results can be evaluated
- Conduct a detailed inventory of assets/deficits for comparing the Capital Region to an ideal situation to identify gaps
- Use SWOT and Sustainability Indicators to assess
- Procurement pooling/ major savings in buying equipment and services
- Commitment – loyalty is key – change adversary relationships between RM's
- Many parties involved but core leadership the province and national
- Top down regulations with funding incentives for cooperative action
- Every level should understand and share the same goal
- Engineering study for capital/ lifecycle costing of various options
- Province and industry leaders
- Public education/Public empowerment
- Give them knowledge of costs and inaction and cost savings of interests
- PMCR and the province
- Data collection system for inventory of assets to move toward streamlining
- Municipal governments, university and consultants
- Create a local green economy

- Instead of sending used resources somewhere process locally
- Reinvigorate capitals system to create new incentives for business
- Currently little incentive to recycle
- Comprehensive waste audit system
- Who is throwing out what?
- What sorts of soils do areas have?
- Create a comprehensive PMCR for Waste management
- Progressive pilot programs – zero waste programs
- Make garbage pickup container smaller
- Education and gather data
- Leveling the field
- Government and municipalities
- Has to be about the bottom line
- Internalizing the cost as well as prevention
- Data collection regarding waste from the province
- Making a business
- Education to young children
- Adults to ensure compliance
- Inventory
- Data collection and analysis
- Consistent regulation
- Framework and bylaws
- Zero sum circular economy
- Communization of private sector
- One planning district – prevents fence hopping of developers
- Consistent cost
- Regional consciousness
- Province needs to take leadership
- Businesses should have incentives
- Oversight group for incentives and resource support
- Equal voice for all municipalities
- Addressing a community problem
- Industry
- Tax breaks for recycling – No incentives for it
- Policy people and innovators – government must lead
- Construction adds the most waste
- Look at precedents – Edmonton
- Compositions and waste disposal diversion – 90% of waste not to landfill
- Government needs to set goals for recycling benchmarks
- Brady Landfill – larger control to green house emissions to province
- Expensive/ most risk tolerant
- Do not sugar coat – Put the big picture out there

- Urban versus rural – Prepare an experimental municipality – create and R&D – What’s the economic incentive? Business development
- Transfer cost of waste
- First Nations – substandard conditions
- Deposit programs (small incentives)
- Think big and identify top concerns – Hog Manure – container composting
- PMCR membership
- Identify economies of scale – options
- Sub committee that tracks progress – Reports
- Consolidating landfills between municipalities – pushing recyclers
- Green Manitoba, PMCR, City of Winnipeg – advocating together
- Bio-solids included in governance model
- Fewer but larger waste management facilities
- City of Winnipeg is larger producer/largest player?
- More drop-off facilities
- Must be regional consider bedroom communities
- Separation between waste and facilities
- Government regulations
- Expand upon the number of things can recycle
- Partnerships with sectorial or academic
- Initiative lessons from Holland
- Separation of organic waste
- Centralized vs. decentralized solutions
- Can we skip the incinerate step
- Peak oil?
- Mind the dumps
- Task force
- Collaboration between provincial and municipalities
- Can’t have too many people involved or nothing will happen
- Keep projects in manageable chunks
- Education

Rapid Fire Question and Answer Session

Question: What are the key message or points you will take away and what is the key message that should be communicated to all Capital Region leaders?

- It's time to act
- Need for collaboration
- Decision-making requires data
- Be innovate and listen yet don't reinvent the wheel if it works
- Learn from other places
- Change is needed- don't be afraid of change
- Education
- Stay committed
- "Reduce" in mind
- Consequences for failure to act
- Reusing, adapting/ monitoring of plans
- Circular economy
- Separating materials and specialized material collection and management
- Providing public education/awareness
- Ask your neighbour if you're unsure where things go (Green MANITOBA)
- Things are getting better for still have a way to go
- Regional facilities
- Compost life cycle analysis to show its valuable (best waste to resource)

Question: What are some innovative strategies or actions to increase diversion and recycling of construction materials resulting from demolition of aged building stock?

- Use more sustainable, longer lasting building materials
- Promote LEED
- Wood waste -> compressed fuel products
- Separating concrete for valuable components
- Reclaim wood for furniture, etc. (low value waste to high value products)
- Qualification of each section/materials to see value
- Modular materials for easy disassembly
- Charge more for unsorted waste
- Training for construction and demolition workers to encourage better sorting
- Don't reinvent the wheel, just find one that fits
- Deconstruction, not demolition
- Collaborative solutions across regions
- Public education for higher demand of good building materials
- Incentive builders/demolition companies to be more responsible
- Increase waste levies/tipping fees
- Incentivize individuals to recycle properly- attach value to materials
- Data collection
- provincial leadership to mandate construction companies to present data on divertible materials
- Eliminating disagreements between rural and urban governments

Question: How can we get the public and municipalities on board?

- Promote the positive, no more tax narrative
- School level education- practical examples for kids/students
- Practical tour for council members
- Carrot and stick; creating incentives for RMs and consumers; e.g.: cost disposal fees
- Reduce complacency; make the economics/business case
- Information for autonomous decisions
- Publicly available data
- Growth strategy
- Continuous resources/longevity of focus
- Leads to collective long-term goals and commitment and short term steps (incremental track record)
 - leads to public/politician accountability
- Broad public awareness campaign (not just in the hands of municipalities)
 - e.g.: combined media and targeted media

Question: From today's presentations, are there aspects in the governance models, the policy or incentives that should be explored to move us from waste to resource?

- Look at best practice (city of Edmonton in regards to its recycling)
- Engage communities that may lack landfill sites (ie: First Nations communities)
- Consolidate landfill sites
- Looking outside PMCR border (to create a mass of support)
- Creating process that prioritizes convenience, short term and long term goals
- Painting the picture with timelines
- Municipality participation and mandated policy regarding landfill
- Attractive/interesting pilot projects that highlight partnership, galvanizes public support
- Legal agreements between the capital region
- Regulations that create innovation
- Data collection
- Planning and modeling at the regional level

Question: Managing our water resources is critical for our continued economic prosperity, as well as way of life. How can we begin to build an understanding that water runoff as well as wastewater as a resource that must be explored and surface water and ground water must be protected?

- Education
- Small scale projects
- Action
- Hands on/ illustrated education
- Environmental/economic/social cost measures
- Involve farmers/sharing risks
- Pay for environmental restoration/ incentives
- Enforcement
- Innovative design/ water sensitive

Next Steps Forward

Part one of the regional waste study is underway and part two and three will be developed from data collected in Phase I as well as recommendations from our stakeholders compiled from the W2R workshop. From an analysis of the current context and comprehensive data collection of the Manitoba Capital Region the next steps include:

- To undertake a feasibility study on the consolidation of landfills and waste transfer toward the creation of a closed loop regional waste approach that identifies relevant markets and innovative incentives to reduce waste through best practice while stimulating the economy and generating wealth and good jobs here in Manitoba.
- Compile a comprehensive list of all regulations currently in place to examine the feasibility of incentives and regulatory conditions to support Pilot Development Projects for evaluation and the adoption of global best practice, policy and regulation across the region.
- Create opportunities for information sharing on a local and national scale to enhance cooperation, to build trust and to empower leadership while engaging residents on a regional scale positioning the Manitoba Capital Region
- Work with knowledge institutions, government, business and industry to identify and facilitate pilot projects with measurable indicators to evaluate and demonstrate global best practice within the Manitoba context.
- Develop a platform for the sharing of information from pilot projects in an open and transparent manner to encourage continued momentum and action in re-imagining the region from a high-movement and low-risk perspective.
- Develop a comprehensive drainage mapping and runoff assessment of all capital region municipalities based on hydrological projections to 2035 to identify quantity, composition and constituents of runoff for creation of a long-term targeted recommendation for building resiliency and protection of our natural lands and our water.

Guest List for W2R (does not include university and knowledge institute attendees)

Abi Olubodun – Cypher Environmental	Faisal Islam – Green Manitoba
Adam Fiss – University of Manitoba	Frances Smee – PMCR
Ahmed Shalaby – University of Manitoba	Gavin Van der Linde – EcoOuest
Andrew Weremy – RM of St. Andrews	George Pike – RM of St. Andrews
Anne van Leeuwen – Consulate of the Netherlands	Glenn Manning – HTFC Planning and Design
Asia Shvarzman – Antex Western	Grant Melnychuk – Province of Manitoba
Audrey Boitson – East Lake Conservation District	Hank Venema – International Institute for Sustainable Development
Babette Meier – Consulate of the Netherlands	Hans Till Freihammer – CH2M
Barry Blue – Progressive Waste	Hans Van Duijne – Deltares
Bill Dowie – Ecoplicity Environmental	Herman Huisman – Rijkswaterstaat
Bob Bodnaruk – RM of Springfield	Ian Hall – University of Manitoba
Brad Erb – RM of Macdonald	Ian Tesarski – RM of St. Andrews
Bradley Muller – University of Manitoba	Inez Miller – MWWA
Breanne Jack – University of Manitoba	Jackie Hunt – RM of Ritchot
Breda Vosters – University of Manitoba	James Cohen – Gendis
Brendo Meulman – DeSaH	James Nosedt – Canadian Forces
Brian Drake – John Brooks Co Ltd.	James Platt – City of Winnipeg
Brian Morton – Recovery Cascades	Jan Oleszkiewicz – University of Manitoba
Cedric Vaderbeken – DRYCAKE	Janice Lukes – City of Winnipeg
Chris Luellman – RM of Rockwood	Jason Syvixay – University of Manitoba
Christa Rust –CBCRA/Recycle Everywhere	Jeff Simpson – Aquatic Life
Christian Korell – Barnes Duncan	Jeffrey Hanson – University of Manitoba
Christine Hutlet – RM of Tache	Jessica Russell-Edmonds – University of Manitoba
Cliff Lechow – Progressive Waste	Jim Buys – RM of Niverville
Conor Smith – University of Manitoba	Jim Campbell – RM of Rockwood
Cory Switzer – MB Conservation and Water Stewardship	Joe Cattani – National Research Council
D.J. Sigmundson – RM of St. Clements	Joelle Saltel-Allard – EcoOuest
Dan Powell – CDEM	Kalika Hoogstraten – University of Manitoba
Daniel Benoit – Indigenous and Northern Affairs Canada	Karen Keppler – Cathedral Group
Darren Fast – University of Manitoba	Karen Melnychuk – Multi-Material Stewardship Manitoba
Darryl Chubak – Cypher Environmental	Ken Beerman – City of Selkirk
Darryl Drohomerski – City of Winnipeg	Kerry Weiss – Emterra
David Van Vliet – University of Manitoba	Kristin Houle – Emterra
Debbie Fiebelkorn – RM of St. Clements	Krystyl Bergen (SM) – University of Manitoba
Dennis St. George – Manitoba Hydro	Larissa Blumenschein (SM) – University of Manitoba
Diane Bastiaanssen – Solar Solutions	Larry Johannson – City of Selkirk
Don Davies – Stantec	Len Chambers – Stantec
Dustin Karsin – Stantec	Lisa Quinn – Green Manitoba
Dwayne Clark – RM of St. François Xavier	
Ellen Enns – University of Manitoba	

Manoj Singh – Stantec
Margo Shaw – MEIA
Marie Storey – Green Manitoba
Mark Hidlebaugh – RM of Rockwood
Mark Miller – Mopia
Mark Townsley – Composite Innovation Centre
Mark Vanderbeken – DRYCAKE
Martin Racicot – Multi-Material Stewardship Manitoba
Matthew Robinson – University of Manitoba
Melissa Dorota – CBCRA/Recycle Everywhere
Michael Solkoski – Tire Stewardship Manitoba
Michael Erlanger – University of Manitoba
Mike Curry – Curry Industries
Mundzir Basri – Stantec
Nora Sutton – Wageningen University NL
Pim De Jager – DeSaH
Randy Park – City of Winnipeg
Richard Gorsshans – International Institute for Sustainable Development
Rick Gamble – Village of Dunnottar
Rick Penner – Emerge Knowledge
Rick Wilson – RM of Springfield
Rob Boswick – MB Conservation Water Stewardship
Robert Rivard – RM of Tache
Roger Rempel – Consultant
Ruud Cino – Ministry of Infrastructure & Environment NL
Saibal Basu – Stantec
Sepideh Datoobar – Eurete
Sheldon Stott – Hylife
Shelley Hart – RM of East St. Paul
Stan Lozecnik – KGS Group
Sylvie Herbert – Green Action Centre
Tanis Osterman – Can Sustain
Tanner Devlin – University of Manitoba
Tebesi Mosala – Indigenous and Northern Affairs Canada
Tony Kuluk – KGS Group
Trevor Sims – Manitoba Hydro
Virginie Devisscher – World Trade Centre Winnipeg
Warren Thompson – Stantec
Will Darracott – Composite Innovation Centre
Yifan Yang – Rijkswaterstaat
Yvo Veenis – Groundwater Technology