

# Provincial Waste Measurement Systems

Alberta Environment and Parks

RCA Measurement and Reporting Workshop

CALGARY      March 8, 2016

EDMONTON      March 10, 2016

# Outline

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- **Reporting tools for non-hazardous waste**
- **Information output**
- **Desired state and next steps**

# Reporting Tools and Output

Reporting Tool	Information Collected	Information Output
<b>Landfill Annual Reports</b>	<ul style="list-style-type: none"> <li>• Disposal and waste placement</li> <li>• Environmental monitoring (groundwater, surface water and leachate)</li> <li>• Construction reports</li> <li>• Complaints and issues, resolution of root causes</li> </ul>	Annual reports publicly available upon request
<b>AEP Materials Management Report (collected through Re-TRAC Connect™)</b>	<ul style="list-style-type: none"> <li>• Municipalities served</li> <li>• Organics processing</li> <li>• Recycling</li> <li>• Disposal</li> <li>• Waste management facility practices (e.g., disposal bans, tipping fees)</li> <li>• Import/export</li> </ul>	AEP Performance Measure (kilograms disposed / capita)

# Reporting tools – Annual Reporting for Landfills

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- **Landfills operating under EPEA approvals ( >10,000 tonnes annually) submit an annual report to department.**
  - Annual submissions are mandatory for all landfills holding EPEA approvals
  - Department submission to the department for non-EPEA approved landfills only required during inspections, or upon written request.
  - Approx. 40 class 1, 2, and 3 landfills; Approx. 40 industrial landfills
- **The annual reports provide details to the department related to ensuring the sites are operating as they should.**

# Output – Annual Reporting for Landfills

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- **Annual reports include information such as:**
  - leachate management and leachate quality information,
  - surface water management,
  - groundwater and subsurface gas migration monitoring,
  - waste received/disposed/removed in tonnes and
  - details on the operation of the facility over the last year
- **Difficult to consolidate data**
  - Large reports; Not consistent with one another
- **Reports are publicly available upon request (an admin. fee applies)**

# Reporting tools – Materials Management Report

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- **Alberta Environment and Parks' Materials Management Report aligns with Statistics Canada's Waste Management Industry Survey**
  - Use Re-TRAC Connect™ to collect data
- **Current data collection is limited**
  - Some municipal landfills; Few private landfills, compost facilities, and MRFs
    - In 2014: 27 municipal landfills and 1 private landfill reported
  - Voluntary reporting for most facilities

# Output – Materials Management Report

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- **Facilities report information on:**
  - Municipalities served, organics processing, recycling, waste disposal, facility management practices (tipping fees), national/international import and exports.
- **Data is consistent for facilities allowing for information to be consolidated.**
- **Most data is not robust enough to share publicly**
- **Do not share individual data (voluntary nature)**

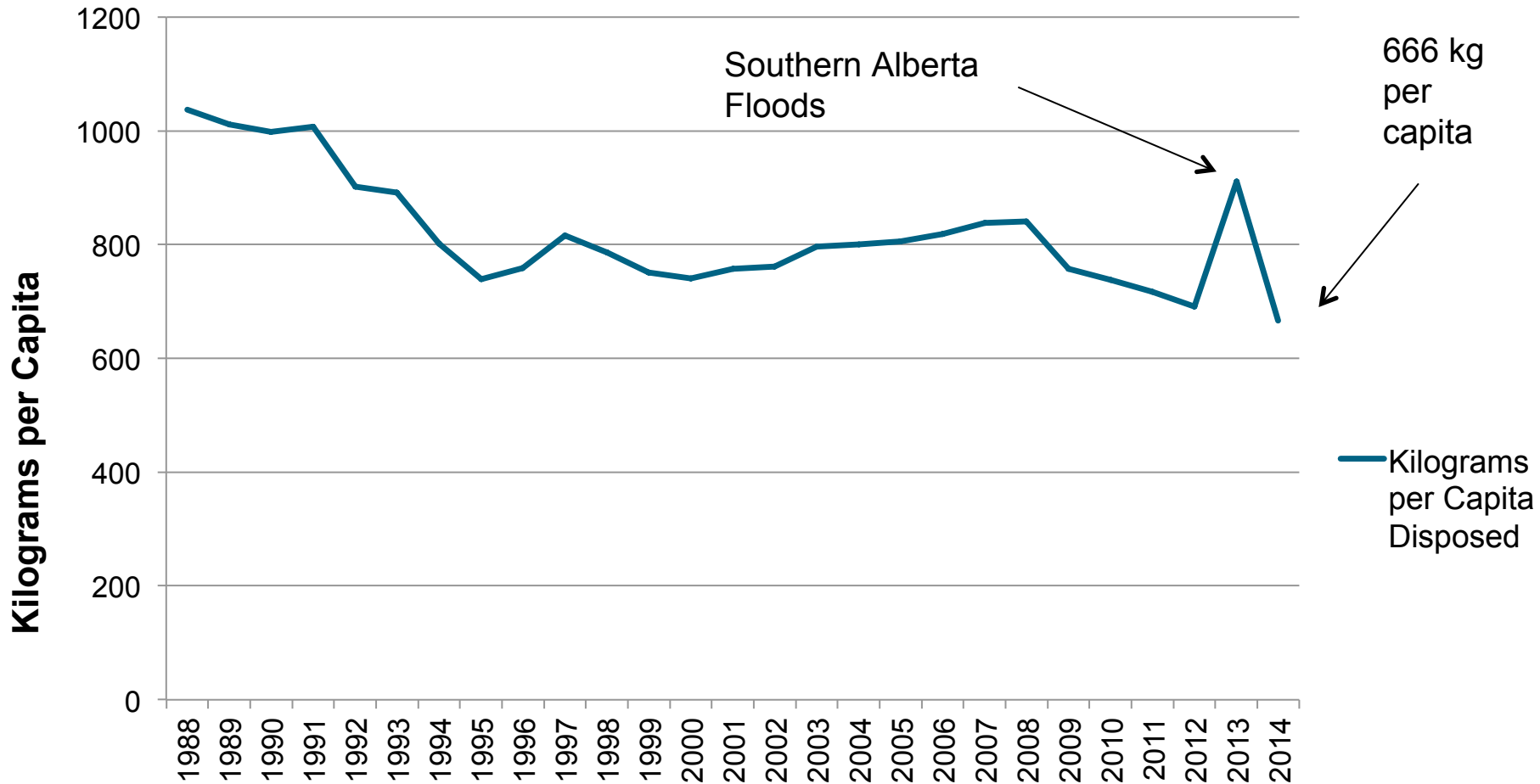
# Output – Materials Management Report

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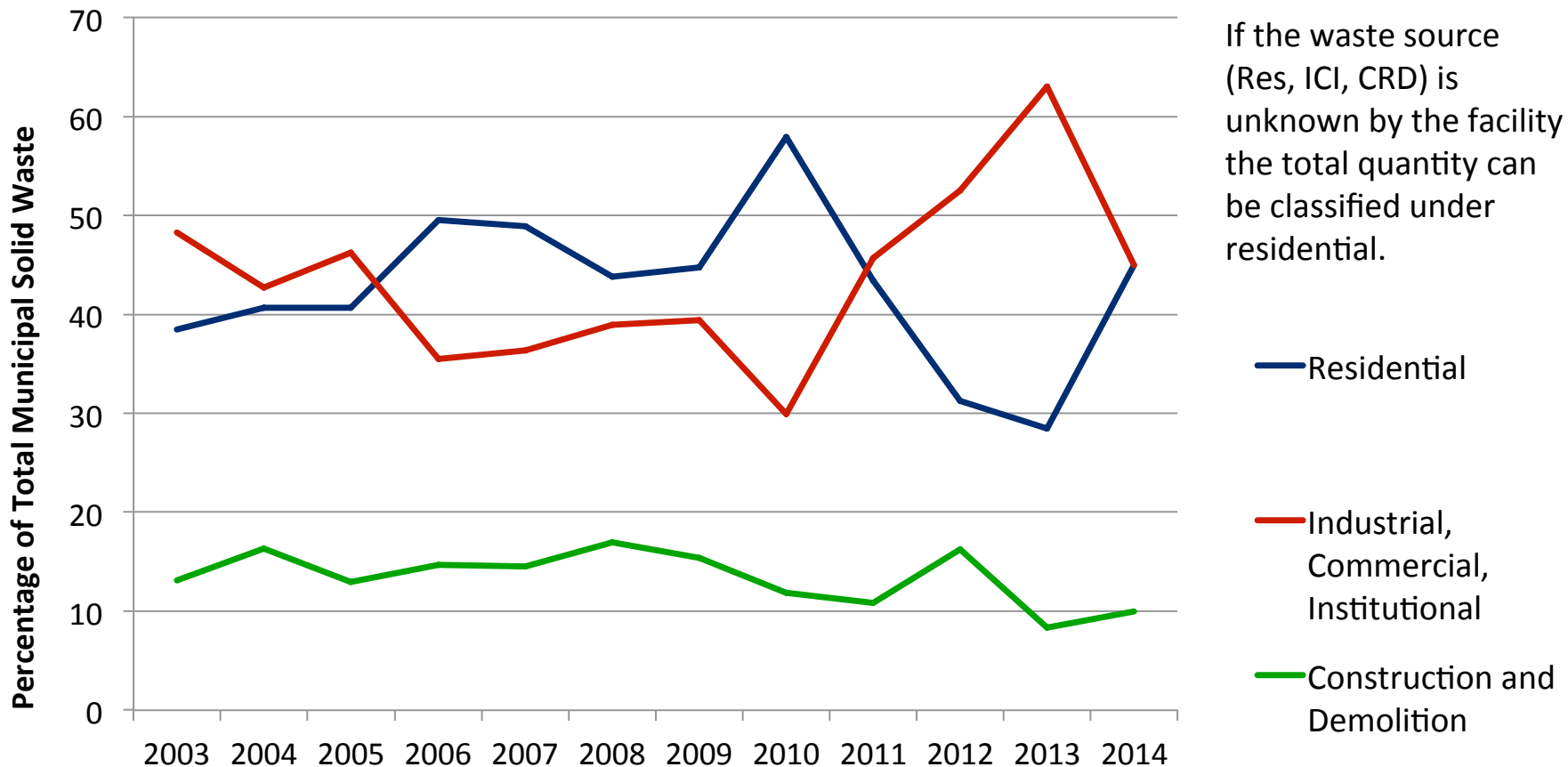
- **Municipal Solid Waste to Landfill (kilograms/capita)**
  - Available in Alberta Environment and Parks Annual Report
  - Municipal solid waste includes residential, ICI, CRD waste disposed in municipal landfills and select amounts to private landfills:
    - **Derive a disposal rate for urban and regional landfills using the tonnes disposed and municipalities served**
      - Population data is derived from the most recent census data
- **Estimates are derived for unmeasured urban and regional populations**
  - Using disposal rates from measured landfills
  - In 2014: approximately 86 per cent of Alberta's population had access to service provided by reporting landfills



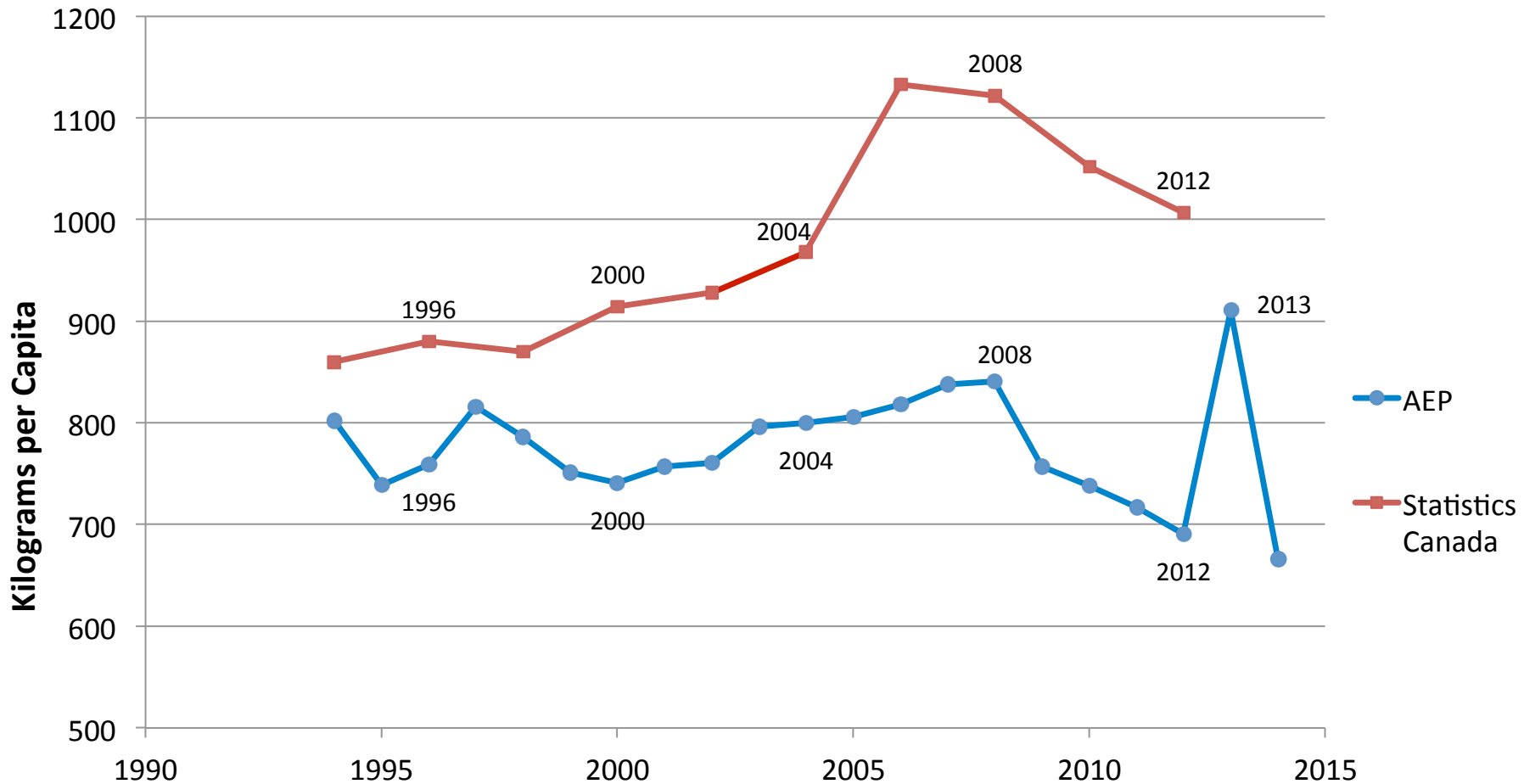
# Results - 1988 to 2014 Results



# AEP Results – Breakdown into source sector



# Comparison of AEP and Statistics Canada Results



# Desired state

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- **Give an overall picture of waste management in the province**
- **Next steps:**
  - Increase data collection from landfills and compost facilities, through voluntary and mandatory reporting mechanisms.
  - Mandatory reporting for specific landfills through approvals.

# Contact Information

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