



# 12<sup>TH</sup> CANADIAN POLLUTION PREVENTION ROUNDTABLE

June 10-12, 2008  
Edmonton, Alberta

Crowne Plaza- Chateau Lacombe





## **10.2 “Building a Residuals Management Ecosystem”**

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City of Edmonton- Drainage Services Branch

EDMONTON



# Building a Waste Management Ecosystem

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City of Edmonton

Canadian Pollution Prevention  
Roundtable

Edmonton, Alberta

June 12, 2008

THE CITY OF  
**Edmonton**

# Building a Waste Management Ecosystem

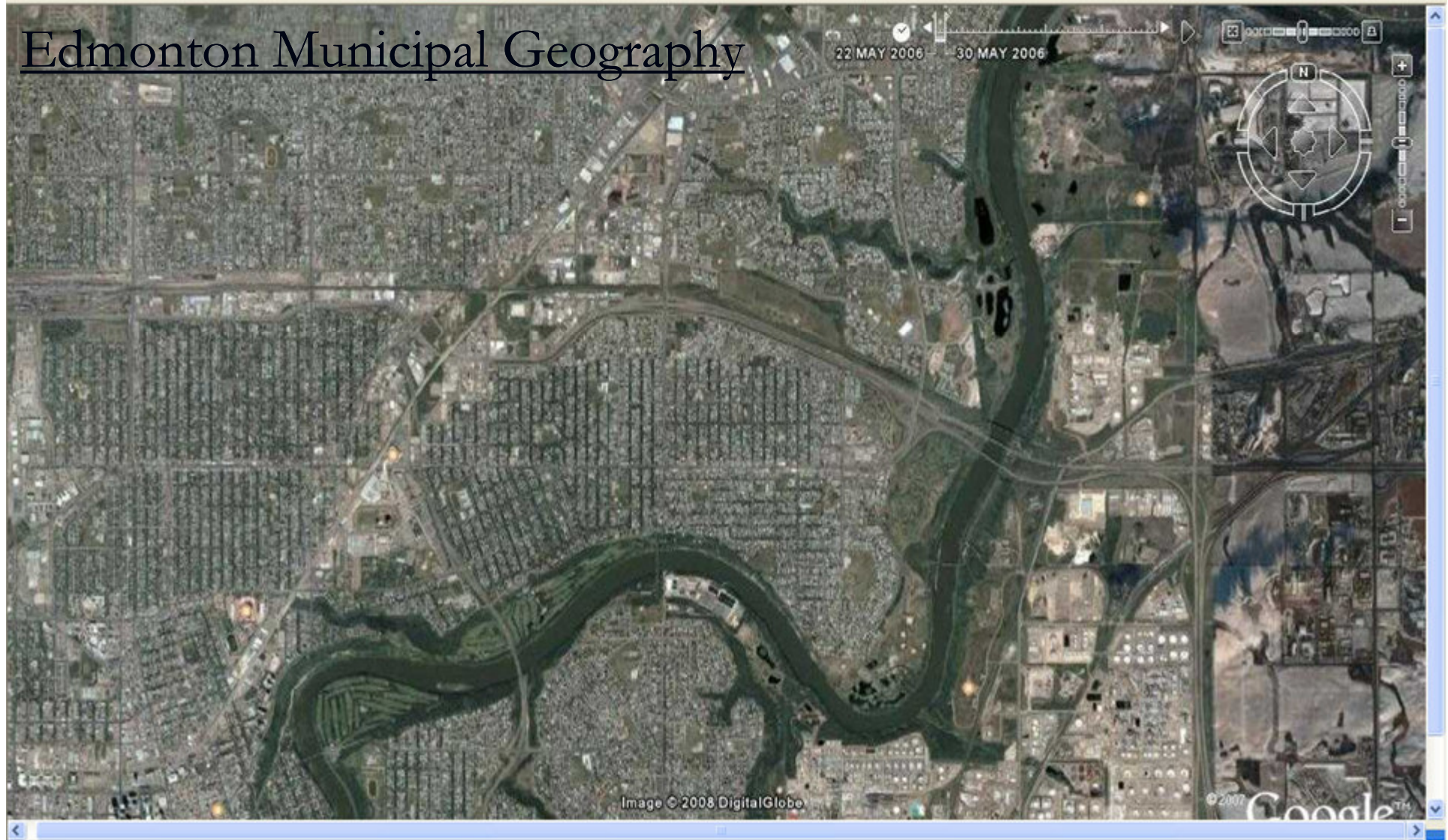
- Edmonton Municipal Geography
- What is a waste management ecosystem?
- New form of public-private partnership
- Creating Value from Waste
- Building a Waste Management Ecosystem
- Conclusions
- Q & A

# Building a Waste Management Ecosystem

Edmonton.jpg - IrfanView (Zoom: 1267 x 708)

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# Building a Waste Management Ecosystem

## What is a Waste Management Ecosystem?

### Classical industrial ecosystem

- the products, byproducts or wastes from one industry are utilized by another
  - substitution of raw materials and energy

### Waste Management Ecosystem

- the products, byproducts or wastes from a community are utilized by industry
- same benefits as an industrial ecosystem such as reduced costs and environmental impacts.
- ultimate goal is to create a more sustainable community
  - satisfy societal and political needs

# Building a Waste Management Ecosystem

## The New P3's

Many forms of public-private partnerships

- provision of a public infrastructure or public service
- sharing of risk and reward between the private sector and a government agency.

*A cooperative venture between the public and private sectors, built on the expertise of each partner, that best meets clearly defined **public needs** through the appropriate allocation of resources, risks and rewards (CCPPP, 1993).*

# Building a Waste Management Ecosystem

## The New P3's

Private sector need to secure municipal assets or resources to meet it's own need.

- raw resources in the form of municipal solid waste (MSW) and municipal wastewater (MWW), the various products that are produced during their treatment and management or the direct access to municipally owned assets.

*A cooperative venture between the public and private sectors, built on the expertise of each partner, that best meets clearly defined **public or private needs** through the appropriate allocation of resources, risks and rewards (CCPPP, 1993).*

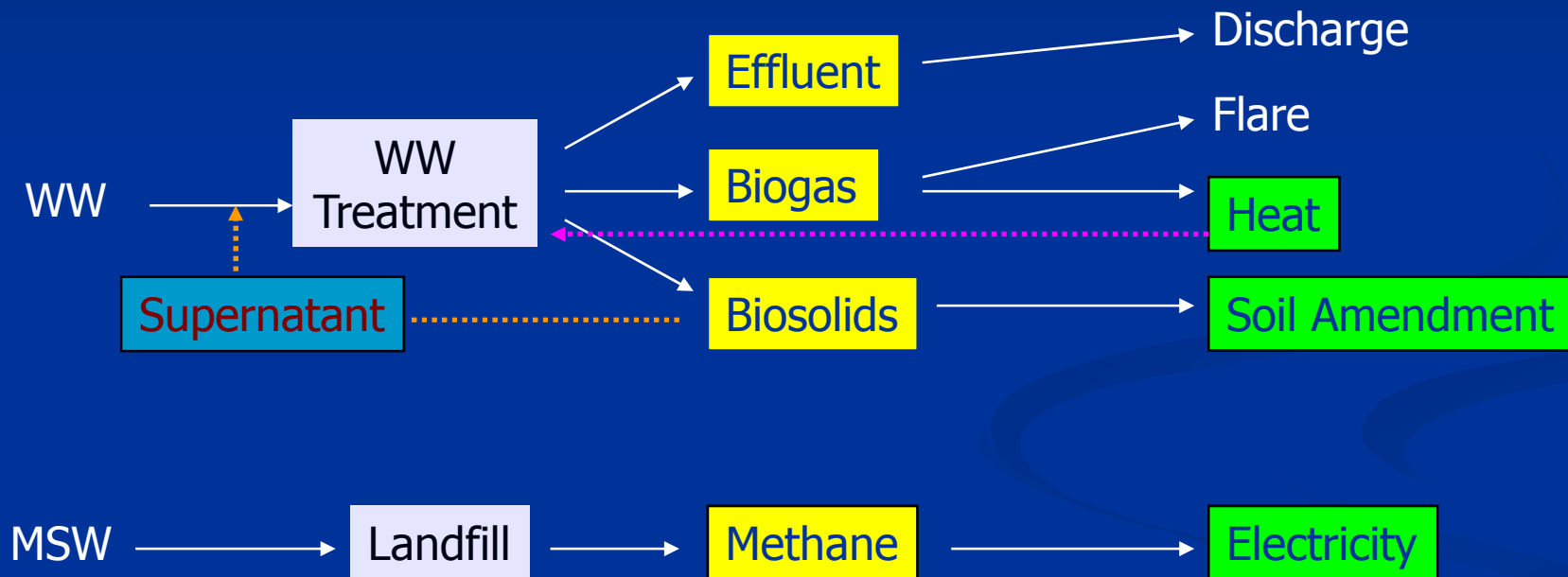
# Building a Waste Management Ecosystem

## Creating Value from waste

- ‘throw away’ societies are recognizing that there is real value in many forms of waste
- innovative solutions to a multitude of waste management issues
- resources that the City of Edmonton can offer to private sector partners
  - collection, delivery and access to raw materials (wastes)
  - land and other assets
  - knowledge and expertise
  - access to government funding.

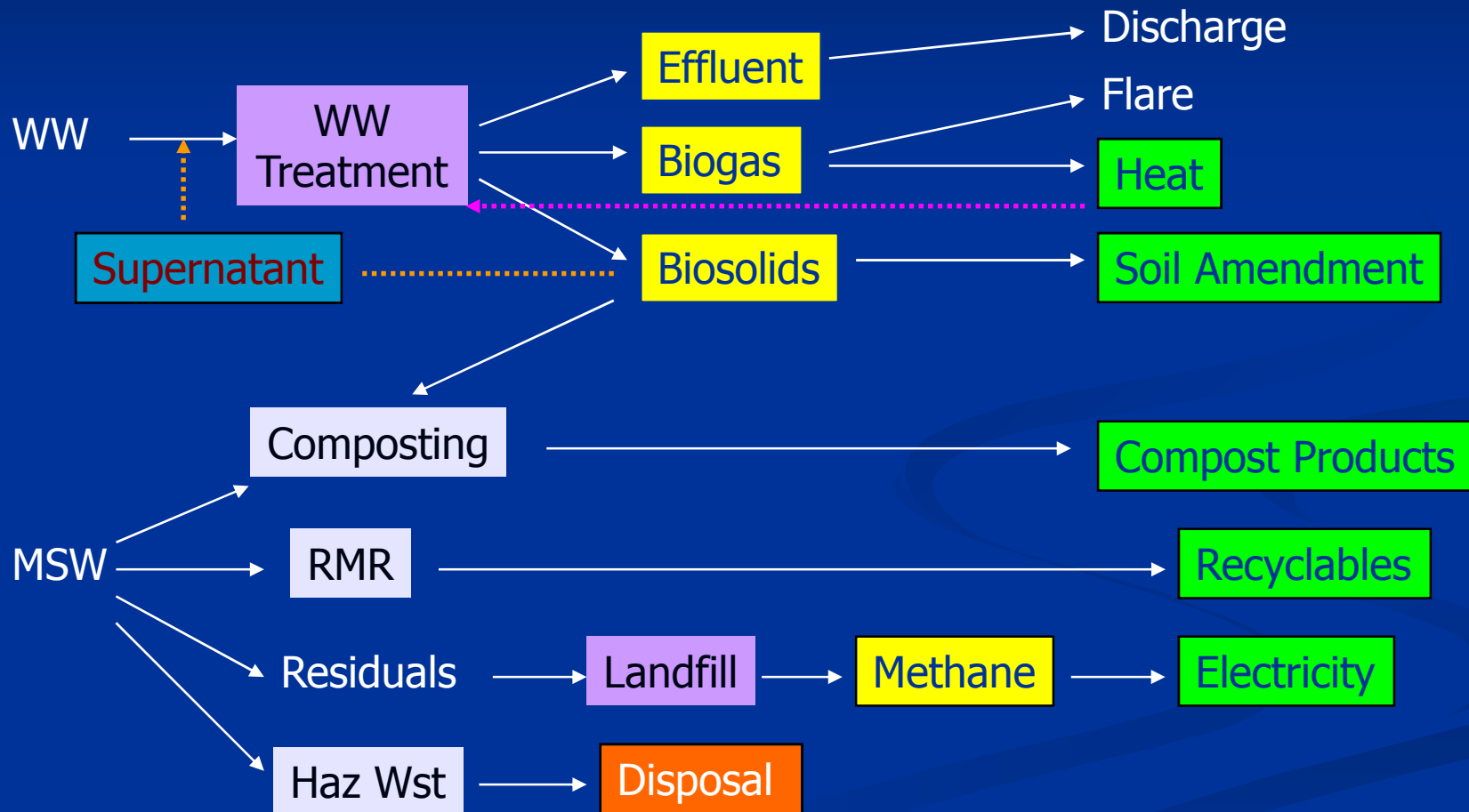
# Building a Waste Management Ecosystem

Past ( 35 yrs)



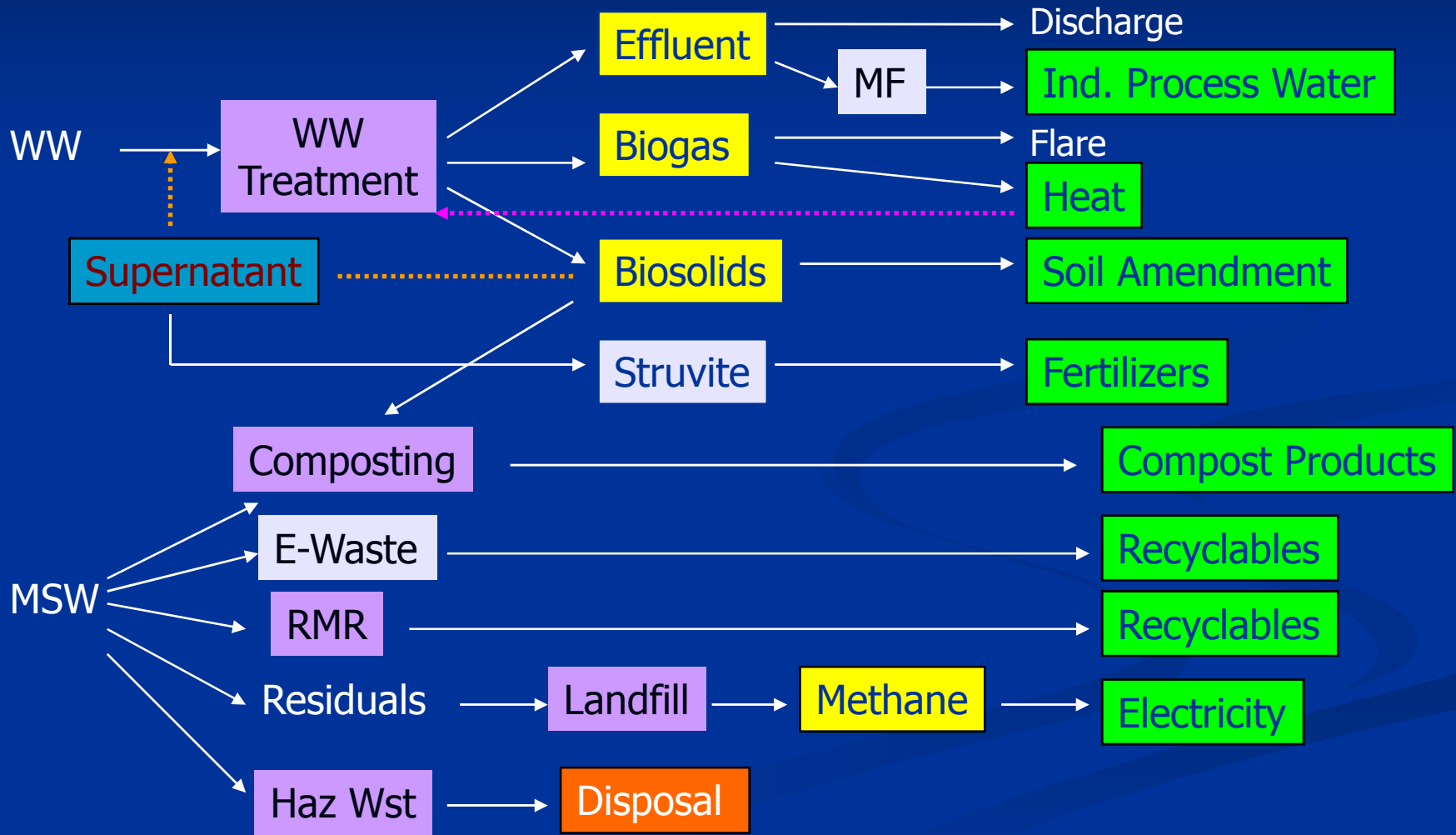
# Building a Waste Management Ecosystem

Resent Past (5 - 10 yrs)



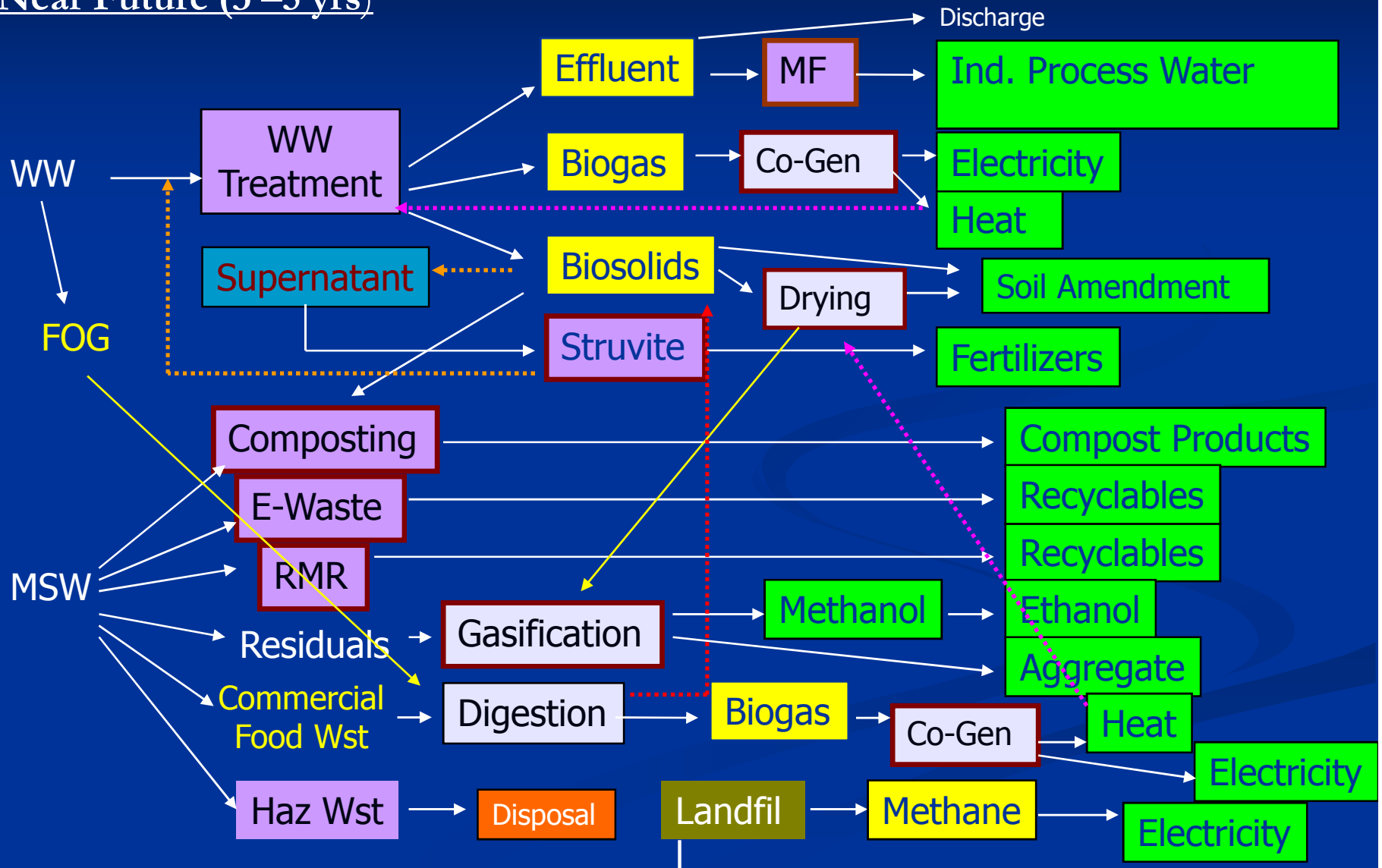
# Building a Waste Management Ecosystem

Present



# Building a Waste Management Ecosystem

Near Future (3 – 5 yrs)



# Building a Waste Management Ecosystem

## Conclusions

Edmonton's Waste Management Ecosystem is healthy because:

- Political leadership
  - Willingness to accept risk
- Dedication and determination of staff
  - Freedom to explore new ideas
- Critical mass of infrastructure
  - If you build it they will come
- Industry partners recognise the value of municipal waste resources
  - Willingness to accept risk

# Building a Waste Management Ecosystem

Questions?

