

ALIGNING PRICE SIGNALS WITH SUSTAINABLE COMMUNITY PLANS

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SUSTAINABILITY ALIGNMENT MANUAL (SAM)

Using Market-Based Instruments to
Accelerate Sustainability at the Local Level



Funded by:



WHY WE DEVELOPED THE SAM

Help **align price signals** in your community with your sustainability goals

- Encouraging the activities/behaviour you want
- Discouraging those you don't

Provide an **inventory** of local-level market-based instruments to support sustainability goals

Raise profile of MBIs among the **policy options** for implementing sustainable community plans (and thus help address the implementation gap)

SAM PROJECT BACKGROUND

- Builds on **Dr. Amelia Clarke's** work on implementing sustainable community plans
- Builds on **Sustainable Prosperity's** work on market-based instruments for local governments
- **Ying Zhou's** Master's thesis, funded by Metcalf Foundation
- Reuben DeBoer's related Master's thesis, funded by Sustainable Prosperity, LURA and Mitacs
- Designed for **Ontario** local governments

Launched today

RESEARCH DESIGN

- Development of the draft SAM from the **literature**
- Two focus groups with municipal staff to gather feedback on the SAM- in **Waterloo and Kingston**
- Feedback session on the beta version at the **FCM Sustainable Communities Conference**
- Case studies on five smaller communities to see if MBIs are relevant: **Huntsville, Halton Hills, Huron County, Frontenac County, King Township**

AGENDA TODAY

Introduction to sustainable community plans (SCPs)

Introduction to market-based instruments (MBIs)

Introduction to the SAMtool

SUSTAINABLE COMMUNITY PLANS

- Called integrated community sustainability plans (**ICSP**), municipal/official plans with additional sustainability content, Local Agenda 21s, etc.
- The Canadian Sustainability Plan Inventory has over **1200 plans** listed. Most have been created since the 2005 Gas Tax agreement.
- Long-term in their vision
- **Integrated content** – economic, social and ecological content
- Bounded by a **geographic (local) region**

Topics by the Category

Environment:



Social:



Economic:



MARKET-BASED INCENTIVES (MBIs): A MISSING PIECE OF THE URBAN SUSTAINABILITY PUZZLE

- Sustainability ambitions
and
- Growing **service demands**
- **Infrastructure** deficits
- **Fiscal** challenges (powers limited to property tax, user fees)

WHY USE AN MBI?

- **Adjust market signals** to (better) incorporate environmental and social costs and benefits
- **Incorrect pricing** contributes to many urban problems
 - e.g., low density, congestion, landfill waste, air quality, infrastructure gap
- Many environmental goals can be met at **lower cost** using MBIs rather than command and control
 - But regulations are essential for pollutants with critical thresholds or extreme damages

MAIN TYPES OF MBIs

- **Price based** (market determines response)
 - **Price:** Factor in “external” costs of pollution or scarcity to influence consumer choice
 - e.g., storm water user fees
 - **Subsidy:** reduce relative cost to create financial incentive
 - e.g., rain barrel rebates/incentives.
 - Includes removal of environmentally harmful subsidies

MAIN TYPES OF MBIs

- **Rights-based** (market determines price)
 - Create a new market by granting/selling a right that did not formerly exist
 - e.g., water quality permit trading
- **Market friction reduction**
 - Non-financial, address market distortion by improving information or growing market demand
 - e.g., mandatory home energy labeling, green procurement

BRINGING PRICING TO SCPs

- Many municipal fees, taxes, and levies established primarily as **revenue tools** can be adjusted to **also create environmental incentives**:
 - City of Toronto, water pricing strategy 2005-2012:
 - Water prices up 6-11%/yr (70% over 7 years)
 - Water use declined 15% overall, 24% per capita

BRINGING PRICING TO SCPs

- Reform existing price structures to **remove hidden subsidies**
 - E.g., marginal cost basis for development charges rather than city-wide average cost basis.
 - encourages denser urban form
- **Introduce new charges**
 - City of Owen Sound: \$2 ‘bag tag’ program led to 21% drop in waste disposal over 2 years.
- Applicable in both large and small municipalities

OTHER BENEFITS FROM MBI:

- More **efficient use** of urban services, and **reduced demand** for new infrastructure/ spending
- Diversify and possibly amplify **revenue** base
 - Shift dependence off property taxes
 - Charge costs to actual beneficiaries of the service, not general taxpayer
 - City of Vancouver: creation of solid waste utility with user fee based on container size enabled a 5.7% reduction in property taxes

OVERVIEW OF THE SAM TOOL

- **Four sections:**

- 1) introduces the purpose;
- 2) introduces MBIs;
- 3) the MBIs / topic;
- 4) a glossary of terms.

- Eight different environmental **topics** (section 3)
- Over **70 MBIs** are identified for local level implementation.

TRANSPORTATION (p.9)

Topic	Sub-topics	MBIs
Transportation	Modal split	<ul style="list-style-type: none"> ■ Anti-idling pay-per-use charges ■ Parking pricing ■ Subsidies for carpool ● Licensing commercial parking space ● Peak-period licensing ◆ Environmental choice label ◆ Hybrid/EV parking locations
	Active and public transportation	<ul style="list-style-type: none"> ■ Subsidized bike parking ■ Subsidized security for cycling ■ Subsidies for transit pass ■ Public transit pricing
	Other	<ul style="list-style-type: none"> ◆ Green public procurement ◆ Partnership approach ◆ Reporting requirements ◆ Other subsidies, funds and grants ■ Scrappage incentives

■ Price-based MBIs
 ● Right-based MBIs
 ◆ Market-friction reduction MBIs

SOLID WASTE (p.11)

Topic	Sub-topics	MBIs
Solid Waste	Waste diversion	<ul style="list-style-type: none"> ■ Waste pricing ■ Scrappage incentives ■ Subsidies for reusable water bottle ◆ Product labeling requirements ◆ Environmental choice label ● Bag tag program
	Waste disposal	<ul style="list-style-type: none"> ■ Residential waste tipping fees ◆ Farm waste and bio-solids management programs ◆ High density residential disposal programs
	Energy from waste	<ul style="list-style-type: none"> ◆ District energy programs ■ Funds to support waste for thermal heating and fuels
	Other	<ul style="list-style-type: none"> ◆ Green public procurement ◆ Partnership approach ◆ Reporting requirements ■ Other subsidies, funds and grants
		<ul style="list-style-type: none"> ■ Price-based MBIs ● Right-based MBIs ◆ Market-friction reduction MBIs

CLIMATE CHANGE (p.14)

Topic	Sub-topics	MBIs
Climate Change	Mitigation	<ul style="list-style-type: none"> ■ Anti-idling development charges ■ Anti-idling pay-per-use charges ■ Subsidy for renewable energy/district energy
	Adaptation	<ul style="list-style-type: none"> ◆ Storm water management ◆ Partnership approach ◆ Reporting requirements ◆ Green public procurement ■ Incentive for urban canopy ■ Incentive for bio-swales ■ Environmental infrastructure-based development charges ■ Funds to support environmental infrastructure ■ Other subsidies, funds and grants

■ Price-based MBIs ◆ Right-based MBIs ◆ Market-friction reduction MBIs

GLOSSARY (pages 17-25)

MBIs	Description	Topics and Subtopics
Name of the MBI in alphabetical order	Short description of MBI	Location of this MBI in the SAM tool

KEY CONSIDERATIONS FOR USE

- The design of an MBI is important
- Complementary communication and education
- Stakeholder engagement
- Comprehensive (equity for users)
- Monitoring and revising

IN CLOSING... THE SAM

Helps **align price signals** in your community with your sustainability goals

Provides an **inventory** of local-level market-based instruments to support sustainability progress

Raises the profile of MBIs among the **policy options** for implementing a sustainable community plan

MORE INFORMATION

- For more information on ‘implementing sustainable community plans’:
<https://uwaterloo.ca/projectla21>
- For more information on Sustainable Prosperity’s work:
<http://www.sustainableprosperity.ca/researcher-categories/sustainable-communities>
- SAM: <http://sustainableprosperity.ca/sam>

THANK YOU, QUESTIONS, COMMENTS...

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QUESTION FOR YOU

- Since its introduction in 2005, one of the requirements of the gas tax funding is the creation of an Integrated Sustainable Community Plan (or equivalent)
- There are no requirements to renew / update an ICSP.
- Given the election results, and the Liberal promise of infrastructure funds for cities, what do you think the role of ICSPs should be?
- How can ICSPs be more effectively used?