# Empowering the Community

## Making neighbourhood renewable energy a reality

## Report from the workshop

June 2007

THE REAL ESTATE FOUNDATION OF BRITISH COLUMBIA

Vancity

Community Energy Association

Connecting Communities, Energy, and Sustainability

Sustainability Solutions Group

Community Energy Association

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# Contents



## About the project


This project is a joint initiative of Sustainability Solutions Group and the Community Energy Association, and it is funded by the Vancity/Real Estate Foundation Green Building Grant. The venue (Floral Hall at VanDusen Botanical Garden) was generously provided by the City of Vancouver. For more information about the project, please contact Will McDowall (will@sustainabilitysolutions.ca) or Dale Littlejohn (dlittlejohn@communityenergy.bc.ca).


Sustainability Solutions Group is an innovative Canadian workers co-operative that works to integrate social, ecological and economic priorities among our clients and in public policy. www.sustainabilitysolutions.ca

The Community Energy Association is a charitable, non-profit society taking action on climate change and energy sustainability by assisting communities to develop and implement energy efficiency and green energy initiatives. www.communityenergy.bc.ca

Community Energy Association

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# Executive Summary

***What is Microgeneration?***
*Microgeneration refers to technologies that produce heat or power at the building or neighbourhood level:*

- *solar air and water heaters,*
- *solar photovoltaics,*
- *small wind turbines,*
- *ground and air source heat pumps,*
- *biomass heating, and*
- *micro-hydro.*

Local governments across British Columbia are ideally placed to promote neighbourhood scale renewable energy, helping to create clean, prosperous communities. This report describes a workshop to explore actions that local governments can take to champion small scale renewable energy, or 'microgeneration'.

Microgeneration technologies contribute to the local economy, reduce greenhouse gas emissions, increase the security and diversity of energy supply, and can engage citizens and foster more sustainable behaviour.

The economic development potential of microgeneration in BC has never looked so good. The BC Government's 2007 Energy Plan creates a business case for microgeneration, providing a guaranteed price for small renewable electricity projects, and other new programs encourage solar and geoexchange heating systems.

Local governments are uniquely placed to enable and promote microgeneration. Elsewhere, local governments have catalyzed national level energy policy shifts through innovative policies and programs. One example is the London borough of Merton. Since 2003 Merton has required developments above 1000m$^2$ to source 10% of their anticipated energy needs from onsite renewables. The policy catalyzed revolutions in building design and in national energy policy, and sparked the development of an industry projected to be worth billions of dollars a year. The UK government now expects every borough to develop a 'Merton Rule'.

*"Tackling climate change must be at the heart of everything planners do. ...planning [is] one of the key methods of tackling climate change and the 'Merton rule' is certainly one of the reasons why."*

Kevin McDonald, Director of Policy at the Royal Town Planning Institute

Lessons from Merton's experience:

- Local governments have the capacity to catalyze broader change: good ideas get copied
- Good ideas can change the rules of the game: initial restrictions of legislative authority can be overcome
- Simple policies, allowing flexibility in compliance, are most effective
- Champions are important: enthusiastic individuals and communities can spur change
- Opposition from the development industry was much less than anticipated
- The success of the Merton Rule has created a vast market for clean energy technologies, bringing down the price and maturing the industry in the UK

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The *Empowering the Community* workshop identified the major barriers to microgeneration in BC, and key actions that BC local governments can take to overcome them:

*"Small renewable energy systems can reduce infrastructure costs for utilities, reduce environmental damage related to burning fossil fuels and provide greater security of supply in the event of energy shortages"*
CMHC 2003

*"of all the policies I have introduced as Mayor, I am certain that the recent steps we have taken to introduce decentralised energy in London will turn out to be among the most crucial to London's long-term well-being"*

Ken Livingstone, Mayor of London, England

| Action | Example / Resource |
|---|---|
| **Overcoming financial barriers** | |
| 1. Change the rules of the game so that microgeneration makes financial sense for developers: fast-tracked permitting, density and rezoning bonuses can all be ued to encourage microgeneration | Saanich, Richmond, Vancouver, Burnaby green building policies. North Vancouver's Lonsdale District Energy Zone, Bowen's rezoning policies, Richmond's development permit area guidelines (solar) |
| 2. Tax shifting: reduce taxes for buildings which install renewable energy | Maple Ridge grants tax exemptions to green buildings |
| 3. Using Local Improvement Charges or revolving funds to finance renewable energy retrofits | Toronto Atmospheric Fund |
| 4. Support the development of energy services companies and contracts | Green Buildings BC for Local Governments (starting up soon) |
| **Overcoming knowledge and capacity barriers** | |
| 5. Train and educate municipal staff about microgeneration technologies, and where they can get help | Dawson Creek |
| 6. Partner with those who can help: other local-governments, non-profits and others. | CAEE program, CEA, Fraser Basin, West Coast Environmental Law. |
| 7. Make support for renewable energy clear: OCP statements, development checklists and targets. | Dawson Creek – Model solar bylaw, Salmon Arm OCP. |
| 8. Create a green development team within the municipal staff which works with developers to enable innovative low carbon and microgeneration projects. | Port Coquitlam works with developers to fast-track green developments |
| **Overcoming inertia** | |
| 9. Create positive examples – install renewable energy in municipal buildings and publicise success to the community | White Rock operations building, Port Coquitlam Recreation Centre |
| 10. Engage the community through visioning and consultation, creating a sense of empowerment and purpose around renewables in the community | City of Vancouver – OneDay program |
| 11. Champion good ideas – explore options for more aggressive policies like the Merton Rule, and lobby for provincial government support | UBCM Resolutions, establish a working group of individuals from several local governments to share ideas and drive innovation |

# Introduction

***What is Microgeneration?***
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- *micro-hydro.*

Local governments around the world have been leaders in tackling climate change by promoting renewable energy at the community level, with innovative policies and programs that have made national-level impacts on energy policy. At the *Empowering the Community* Workshop, Sustainability Solutions Group and the Community Energy Association brought together a group of municipal officials and planners, renewable energy experts and provincial officials to explore policies to promote microgeneration in British Columbian communities. This report provides an overview of the workshop.

# Microgeneration and local government: views from the UK and BC

## The Merton Rule: How local governments can lead the way, and why they should

The "Merton Rule" requires all new development (above a threshold 1000m$^2$ or ten residential units) to provide 10% of anticipated energy demand through the installation of renewable energy equipment.

The London Borough of Merton would seem to be an unlikely place to start an energy policy revolution. It usually makes the news only once a year, as home to the Wimbledon tennis championships. But in 2003, planners initiated a policy shift that catalyzed an alternative energy market estimated at over 1 billion pounds and thousands of jobs.

Planners at Merton worked from simple principles. They recognised that deep cuts in emissions are urgent, and that they should pursue financially sound carbon reduction policies in areas over which they had control.

When the Merton Rule was announced, it was opposed by the UK government's planning office, which argued that Merton did not have the authority to impose the policy. Merton planners worked with a partnership of non-profits, businesses and other local governments and convinced the government to accept the policy. Since then, boroughs across the UK have been racing to develop Merton Rules of their own. Four years after the introduction of the policy, the UK government announced that it would expect all boroughs to develop a Merton Rule. In recognition of the success of the policy, Merton was awarded the UK's top urban planning award in 2006.

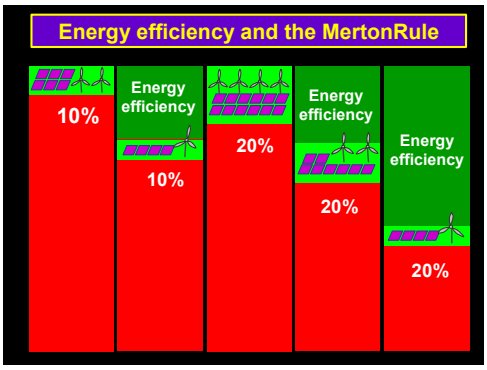
**Exponential industry growth**
**Every borough must have a MertonRule**
**x 425 Boroughs….**

| | | | | |
|---|---|---|---|---|
| 25 Turbines | x 425 | 10,000 | £30,000 | £300,000,000 |
| 200kW PV | x 425 | 85,000 | £5,000 | £425,000,000 |
| 5,750 m$^2$ Solar heat | x 425 | 2,500,000 | £400 | £1,000,000,000 |
| | | Annual Total £1,725,000,000 | | |

*As well as jobs in architecture, R&D, etc*

*"Merton's experience is that there has been very little opposition from developers to the policy, and indeed some have been very keen to incorporate it into their schemes."*

Judges of the Royal Town Planning Institute's Planning Awards 2006




The Merton Rule encourages efficiency as well as renewables, by creating an incentive to reduce overall building energy demand.

## Lessons from the Merton experience

- Local governments have the capacity to catalyze broader change: good ideas get copied
- Good ideas can change the rules of the game: initial restrictions of legislative authority can be overcome
- Simple policies, allowing flexibility in compliance, are most effective
- Champions are important: enthusiastic individuals and communities can spur change
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**The BC Energy Plan will establish a guaranteed price for small renewable energy installations**

- Facilitate distributed clean electricity
- A Standing Offer of purchase
- Renewable energy and co-generation projects with a capacity of ≤10 MW.
- The price based on the most recent call results

## The BC perspective

The Merton story is an inspiring example of climate leadership at the local level, but the circumstances in the UK are very different from those in BC. A Merton Rule in BC would likely be open to legal challenge, since the *Local Government Act* and *Community Charter* do not grant BC local governments the legislative authority to pass such a rule.

### *The provincial energy policy landscape*

The energy system in BC is dominated by large scale hydro electric power, mostly produced and delivered by the crown corporation BC Hydro, and sold to consumers at rates that are among the lowest in North America. Over recent years, investment in new supply has lagged behind demand growth, and BC has made up the shortfall with (often coal-fired) electricity imports. Natural gas also plays an important role in BC, particularly for space and water heating, which are responsible for the majority of BC's energy-related carbon emissions.

*The 100,000 inhabitants of Helsingborg, Sweden, are heated entirely through biomass district heating, using technology that emits less pollution than standard natural gas furnaces. 60% of Helsingborg's heating is provided from wood pellets from British Columbia's forests.*

The BC Government's 2007 Energy Plan sets out the direction for BC's energy policy over the coming years, and it contains a number of measures of direct relevance to community level microgeneration. Andy Jani, from the BC Ministry of Energy, Mines and Petroleum Resources, presented details of the energy plan to the workshop. Relevant measures include:

- A target to meet electricity self-sufficiency by 2016, partly through an Advanced Renewable Tariff & net metering. This will enable developments with building-integrated renewables to sell excess power to the grid, at attractive rates.
- Continued emphasis on maintaining cheap electricity

- 50% of forecast demand growth will be met with efficiency gains, rather than new supply. This includes energy efficiency targets for buildings and the development of a new and 'green' building code.

*Energy policy at the community level in BC*

Local governments can promote microgeneration through a variety of policies and actions. This section, based on the presentation given by Michael Wilson of the Community Energy Association, highlights examples of BC local governments taking a leadership role in microgeneration policy.

**Local Governments and Energy**

- Canadians are the 2nd highest energy users in the OECD
- ~ $4,300/person/year on energy
- Municipalities directly account for 9% of GHG emissions, indirectly 45%
- Rising prices and supply instability will have major impacts on local businesses and residents

Many local governments have adopted energy policies for their own operations, such as minimum standards for buildings (using, for example, LEED standards). Several BC municipalities, including the District of Saanich and the Cities of Richmond, Vancouver and Burnaby, have developed green building policies, although none specifically address the inclusion of renewable energy.

Other policies address the broader community. These include *service area bylaws*, which the City of North Vancouver has used to create the Lonsdale District Energy Zone; *density bonusing*, which has been used to support renewable energy in Hailey, Idaho; *rezoning policies* are used to encourage green building and renewable energy on Bowen Island; *Comprehensive Development Zoning* has been used at Dockside Green in Victoria to create an integrated sustainable community; and the City of Richmond has used *development permit area guidelines* to enhance passive solar energy.

**White Rock Operations Building**

- Solar hot water and space heating
- Photovoltaics provide 5% of electricity requirements
- LEED Gold certification

In addition to the development of ongoing policies, some local governments have led the development of renewable energy projects: examples include the operations centre of the City of Whiterock, which has reduced annual energy costs by 40%; the City of Revelstoke, which pioneered the first renewable district heating system in BC; and Dawson Creek, which has installed solar heating systems in municipal buildings and partnered with non-profit groups to deliver education and outreach about renewable energy in the community.

# Workshop Session 1: Barriers to microgeneration

The first session of the workshop aimed to identify the most important barriers to microgeneration. Participants brainstormed a list of barriers, and then considered the relative importance of each. The discussion highlighted some broad themes:

1. **Financial and economic issues**: The high upfront costs of microgeneration technologies and BC's very low electricity rates combine to deter developers, municipalities and homeowners from purchasing renewables. This is exacerbated by split incentives: developers and landlords make the decisions to install renewable energy, while tenants benefit from the reduced energy costs.
2. **Inertia and 'fit' with existing systems:** It is difficult to induce change in systems to which we are all deeply accustomed. Rules and regulations (such as permitting rules) are often inappropriate for emerging technologies. The mindsets of engineers, utilities and developers are rooted in a centralised-energy paradigm, which can be hard to break. Neighbours may feel threatened by new technologies, especially those associated with ugliness (like wind turbines) or nuisance (like biomass heat)
3. **Knowledge, awareness and capacity:** A general lack of knowledge and awareness on the part of municipalities, developers and consumers about renewable energy technologies was seen as a major challenge. Potential consumers do not know where to find information, while municipal staff struggle to work out where unfamiliar technologies fit into existing rules and codes, and often lack the time and resources to champion new ideas.

*"Many land use planners and municipal permitting officials are not familiar with wind energy …Consumers who embark on a small wind energy project … may encounter a daunting array of siting considerations and confusing regulations."*

Canadian Wind Energy Association

# Workshop Session 2: Current policy options for BC municipalities

The second workshop session aimed to identify the measures that BC municipalities can take to promote microgeneration. The discussion focused on actions that can be taken now, rather than those that would require changes in provincial legislation. Policy options were identified under four broad categories: 1) Regulatory tools, 2) finance and incentives, 3) information, awareness and policy, and 4) leading by example.


**1. Information, awareness and policy.** Discussion focused on ways to demonstrate the intent of the municipality to developers and others, and to foster capacity, interest and understanding of renewable energy opportunities. Actions included:

- A statement of support for microgeneration in the OCP
- Community consultation – both at OCP and project level
- Creating teams of staff who function as facilitators for renewables and green development
- Education programs could be valuable for many stakeholders, but would need to be user-driven to ensure relevance
- Development checklists

**2. Finance.** There are a variety of mechanisms for overcoming the upfront investment barriers to microgeneration, including:

- Taxation mechanisms: use taxes to fund and encourage microgeneration (e.g. Local Improvement Charges, tax credits)
- Direct financing – especially where municipality can act as the utility and recoup capital expenditures. Revolving funds, such as the Toronto Atmospheric Fund, are another mechanism
- Using a municipal green development team to facilitate innovative financing between developer, utility and municipality, for example through energy service contracts

*Solar in Vancouver – the SPEC building*

**3. Regulatory requirements and process.** Municipalities control much of the regulatory environment that governs the choices made by developers and homeowners.

- Fast-tracking of developments incorporating microgeneration, using performance-based criteria (improvements in energy or carbon performance compared to regional average, for example)
- Use re-zoning, density bonuses and other mechanisms to encourage green development, and ensure that the benefits last through the use of covenants
- District energy zones and comprehensive development zones

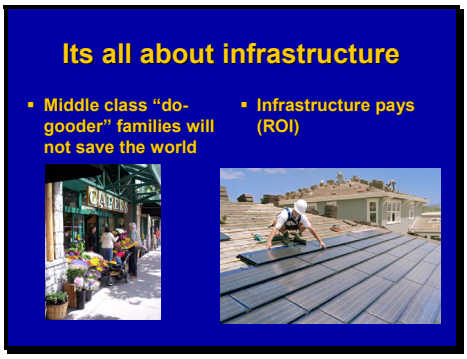
**4. Leading by example.** Local governments can champion and demonstrate choices that are financially and environmentally responsible.

- Civic building policies, such as a commitment to install renewable energy systems where possible
- Demonstration projects in municipal buildings
- Building operation and re-commissioning commitments that demand a high energy and emissions performance over time
- Setting and acting on renewable energy and emissions targets

Effective communications and education are vital if the local government actions are to inspire broader change.

# Workshop Session 3: Moving forward

Municipalities acting alone are currently constrained in their capacity to create change, in part because of limits to their regulatory authority. Participants highlighted strategies for advancing the capacity of local governments to champion microgeneration in British Columbia, and identified some areas in which local governments need support.




**Partner and engage**

Creating momentum for change means developing partnerships with shared goals and strategies. A working group to move forward the dialogue on community microgeneration would be an important first step. Such a group must be inclusive, including local governments, developers, utilities, NGOs and provincial and federal levels of government rather than just committed activists and advocates.

Community visioning and consultation can empower citizens and governments to work together towards sustainable energy goals. Such processes can help to overcome misunderstandings and potential 'NIMBYism', and replace opposition with enthusiasm and a sense of community pride and ownership.

**Target the province to help promote microgeneration:**

- Building code revisions
- Change to the BC Utilities Commission interpretation of 'public interest'
- Solar-ready homes requirement
- Change local government act to allow 'Merton Rule' policies

**Actively champion change**

Partnering is essential for broader change, but inspirational leadership often comes from the efforts of those who move ahead of their peers. The group recognised the importance of individuals and governments that champion renewable energy, both by advocating for change (by, for example, bringing resolutions to the UBCM) and through leading by example rather than waiting for others to join. In particular, well publicised innovative projects and policies were emphasised as a potential catalyst for change. In other fields, municipalities have pooled resources to hire lobbyists to make their case for provincial support.

**Municipalities need help**

Municipalities need support in promoting microgeneration. The group identified a number of supports that would be most helpful for municipalities:

- Concrete examples of solutions that can be applied in local situations
- Streamlined information sources, and a one-stop shop for information on renewable energy
- Help identifying and leveraging provincial and federal funding sources
- Validation, recognition and celebration of effective policies and projects, for example through award programs

# Conclusions

*"the thing that cities do best is to copy each other"*

Tom Osdoba, former Sustainability Manager, City of Vancouver

Local governments make decisions made every day that have impacts for over 100 years. Climate change and peak oil are within their planning horizon. Some local governments are taking a leadership role on mitigating these challenges and adapting to them. They will attract the economic development that goes with leadership. Microgeneration will be a part of the future. The workshop highlighted key actions for promoting microgeneration in the community now:

| Action | Example / Resource |
|---|---|
| **Overcoming financial barriers** | |
| 1. Change the rules of the game so that microgeneration makes financial sense for developers: fast-tracked permitting, density and rezoning bonuses can all be used to encourage microgeneration | Saanich, Richmond, Vancouver, Burnaby green building policies. North Vancouver's Lonsdale District Energy Zone, Bowen's rezoning policies, Richmond's development permit area guidelines (solar) |
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# Appendix 1: Microgeneration technologies in BC

| Technology | Description | Cost indicators | Potential in BC |
|---|---|---|---|
| Solar Photovoltaic (PV) | Flat panels or tiles, usually roof-mounted, which generate electricity | 60-90 c/kWh, or $15,000 for a 2kW panel (for a single family home). High cost can be offset if used as a roofing material. | Estimated total generating potential of more than 400MW on BC residential and commercial buildings |
| Solar Heating | Solar water and air heaters are used in parallel with traditional heating systems. | Solar water heaters cost around $8000 for a single family home. | Solar hot water systems are suitable for a majority of residential and commercial buildings. |
| Small wind | Small wind turbines (1-100kW) are best suited to sparsely populated areas with consistent wind. | 12-46 c/kWh, or $50,000 for a 10kW system. A single family home 1kW system would cost around $6500. | There is a good resource for small wind in BC, especially along the coast and in the Cariboo and South Okanagan regions. |
| Geo-exchange /heat pumps | Ground-source heat pumps take warmth from the ground and transfer it inside buildings, using much less electricity than traditional electric heating. | Installation for a single family home costs around twice as much as a conventional electric system, but operating costs are often 25-50% lower. | A recent report identified commercially viable potential for more than 10,000 units in the GVRD alone. |
| Micro-hydro | Hydro projects come in a variety of scales. Here, we are considering systems of less than 1MW, and as small as 1-2kW. Such installations have minimal environmental impacts | Upfront capital costs are around $3-4000 for a 1kW system, or $20,000 for a 10kW system. Larger systems provide power at around 5 c/kWh. | There are estimated to be several thousand suitable sites available in BC for systems between 1-100kW. |
| Biomass heating and combined heat and power | When burned cleanly, wood can produce both heat and electricity at low cost and high efficiency. Systems can range in scale from a stove to heat a single room to a district energy system for whole developments. | Costs vary hugely with the range of possible technologies. Upfront costs are high, but fuel costs very low. | The resource in BC is enormous. One in three households already use some form of wood heat, which accounts for 4.5% of residential energy use. Most is currently burnt inefficiently. |

# Appendix 2: List of Participants

| Participant | Organization |
|---|---|
| Adrian Hewitt | London Borough of Merton |
| Chris Baber | City of Vancouver |
| Alex Boston | Independent |
| Allan Dobie | CMHC |
| Andy Joni | BC Ministry of Energy, Mines and Petroleum Resources |
| Bill Tubbs | Simon Fraser University |
| Bud Fraser | Holland Barrs |
| Cecil Bannister | Central Saanich Energy Committee |
| Chis Mott | BC Sustainable Energy Association |
| Dale Littlejohn | Community Energy Association |
| Emilie Ouellet | Eco-industrial |
| Fernando Escobar | Eco-industrial |
| Jason Found | Sustainability Solutions Group |
| Jason Smith | Bowen Island |
| Jeff Charmichael | GVRD |
| Jeremy Murphy | Sustainability Solutions Group |
| Karen Gorecki | Climate Change Central |
| Kristen Mucha | Terasen Energy Services |
| Laura Porcher | Community Energy Association |
| Lindsay Cole | Sustainability Solutions Group |
| Lisa King | District of Delta |
| Mark Hartman | City of Vancouver |
| Mark Holland | Holland Barrs |
| Martin Clarke | GVRD |
| Marvin Hunt | City of Surrey |
| Matt Horne | Pembina Institute |
| Maureen Cureton | Community Business Banking, Vancity |
| Michael Wei | District of North Vancouver |
| Michael Wilson | Community Energy Association |
| Morgan McDonald | SolarBC / Taylor Munroe |
| Phillip Be'er | CityGreen |
| Richard Clarke | BC Sustainable Energy Association |
| Sheila Malcolmson | Gabriola Island Trust |
| Tamara Connell | Vancity |
| Ted Sheldon | BC Ministry of Environment |
| Will McDowall | Sustainability Solutions Group |

# Appendix 3. Workshop Outputs

*Table 1. Summary of session 1 discussion*

| | Barrier (important barriers in **bold**) | Discussion |
|---|---|---|
| Financial and economic | **High upfront costs of microgeneration technologies, and relative low cost of heritage hydro** | Very important. Related to historic subsidies, a lack of full-cost accounting, and financing issues. |
| | **Split incentives: tenant, landlord, developer** | Very important issue, suggesting need for service concepts that enable benefits to be captured by those making energy system decisions. |
| | Availability of financing for microgeneration | Not a central issue, but one for which information is critical – financing exists, but potential consumers do not know how to access it |
| | Environmental and social attributes of microgeneration not reflected in price | closely related to the high relative upfront costs of microgeneration technologies |
| | Financial risk: new technologies must work well for years to ensure payback | A problem for all new technologies, can be minimised with development of quality standards |
| Inertia and 'fit' | **Inertia: 'the mega-project hangover'** | Centralised energy mindset among developers, local governments and utilities |
| | Permitting fees unfairly punish renewables | A minor problem, not an issue at all in many local governments. |
| | Zoning and permitting rules may actively discourage renewables | Some disagreement on importance. Seen as related to staff knowledge and capacity. |
| | Vested interests block change | Some saw this as very important |
| | Property tax implications of net-metering | Not seen as important |
| | Multiple mandates and decision-makers | No one institution has mandate to promote it |
| Knowledge, capacity and skills | **Lack of awareness: municipal staff, developers and consumers** | Major issue: decision-makers and buyers not aware of options; municipal staff must learn about each new technology case by case. |
| | Skills shortages among trades: lack of experience with renewables | Not currently a major problem, may become so as market expands |
| | **Staff and institutional capacity within local governments** | Major barrier to policy and practice change – limited resources for staff training |
| | Unrealistic expectations | Hype and disappointment damage the market |
| | Lack of full cost accounting and data for investment decisions | Good, clear data on costs, savings and system performance are necessary for investment |
| | No clarity on liabilities, legalities | Unclear who will be responsible when things go wrong. |
| Social barriers | Public misconceptions | Particularly around wind and biomass energy, or where previous green technologies have failed in the past, creating a negative stereotype |
| | **"NIMBY"-ism (Not In My BackYard)** | A potentially major problem especially for wind turbines and biomass cogeneration |
| | Lack of champions | Change requires people to lead and inspire |

*Table 2. Summary of local government policy options*

| | Measure | Discussion |
|---|---|---|
| Information, awareness and policy | Supportive statements in OCP | Important way of indicating support for renewable energy, but on its own has limited effectiveness |
| | Community consultation processes | Engage community, create common vision and awareness, but can be expensive. Need to be matched with action if to have real impact. |
| | Training of municipal staff | Expensive but can be highly effective. |
| | Development checklists | Straightforward way of making preferences of local government known, but proliferation of different checklists can become confusing |
| | Establishing teams of staff to facilitate green development | This was seen as high impact and high feasibility. Local government rules can be seen as a barrier to innovative development and microgeneration – need to create the administrative structures that allow local governments to be facilitators and enablers. |
| Financial | Fee exemptions | Straightforward, but limited impact |
| | reduce property tax in return for renewables installation | Could get utility to compensate municipality? |
| | Local improvement charges | Investment recaptured through taxes, associated with building not with owner. |
| | Partnerships with utilities and developers for direct financing | Could work through the formation of energy service companies or city utilities |
| | Use green or carbon credits to finance retrofits and renewables | Provides limited financial benefit. Difficult to show 'additionality', or that credits are not being double-counted. |
| Regulatory | Streamline/fast-track for developers incorporating renewables | Gives developers strong incentive to include green features. High impact, particularly if there is a dedicated green development staff team in the municipality |
| | Bylaws requiring renewables for rezoning, variances, renovations, etc. | Powerful tool, but often limited by legislative authority |
| | Comprehensive development zones, district energy zones | Can be important, but opportunities to do this sometimes limited. |
| | Density bonuses | No direct ability to 'bargain' for increased density, must be used carefully, ideally with covenants. |
| Leading by example | Demonstration projects | Very important, but expensive, and need to be properly communicated to be worth doing. |
| | Municipal building policies and commitments | Many cities already have these, with for example a LEED requirement. A city could adopt a Merton Rule for their own buildings. A building maintenance and re-commissioning commitment could address existing buildings. |
| | Targets for renewable energy | Municipal targets around renewables would be easy to pass, but would need to be met to be credible. |