City of Holland
Office of the City Manager
City Hall - 270 South River Avenue
Holland, Michigan 49423
Phone: (616) 355-1310 - FAX: (616) 355-1490
E-mail:  r.cotton@cityofholland.com

Special City Council Study Session with the Board of Public Works
Agenda (†)
Wednesday, July 11, 2012 – 5:30 PM – Council Chambers – First Floor @ City Hall at Special Tables

<table>
<thead>
<tr>
<th>Estimated Time *</th>
<th>Item</th>
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<tbody>
<tr>
<td>5:30 PM</td>
<td>1.</td>
<td>Public Comments (for items not on Agenda).</td>
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<tr>
<td>6:00 PM</td>
<td>3.</td>
<td>Community Energy Plan Adoption Resolution (Draft).</td>
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<tr>
<td>6:30 PM</td>
<td>4.</td>
<td>Date of Formal Council Meeting to Approve the Community Energy Plan Adoption Resolution and Action Plans.</td>
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<tr>
<td>6:45 PM</td>
<td>5.</td>
<td>Other Business.</td>
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<td>6:50 PM</td>
<td>6.</td>
<td>Adjourn (to the Re-scheduled Regular City Council Meeting).</td>
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(†) Study Sessions are City Council work sessions at which the council reviews and discusses various issues in the City of Holland, as listed on this agenda. Study Sessions are intended to facilitate City Council discussion on these issues that may, or may not, be acted upon at a future business meeting of the City Council. No action or vote will be taken at a Study Session on any item. While the public is invited to attend the Study Session, public comment is limited to the agenda item identified as such and generally will not be solicited during the discussion of the other items listed on this agenda.
OFFICE OF THE CITY MANAGER  
CITY HALL  
HOLLAND, MICHIGAN  

City Manager Report  

To: Mayor Dykstra and Members of the Holland City Council.  
Date: July 5, 2012  
Subject: Holland Community Energy Efficiency and Conservation Implementation Strategy  

Background  

The Garforth Report was completed in September 2011. The Holland Community Sustainability Committee (HCSC) recommended a Holland Community Energy Plan to the City Council on October 17, 2011.

The Holland City Council accepted the Sustainability Committee's reports as information. The Holland City Council considered the matter in Study Session on December 14, 2011. No action was scheduled pending a Sustainable Return on Investment Report. Since this Report is nearing completion, Mayor Dykstra directed that this matter be brought back before the Council and the Board of Public Works meeting together in Study Session on July 11, 2012.

Attachments  

A series of Implementation Action Plans were drafted by staff to facilitate your review of the Community Energy's Plans six components. These Action Plans contain recommendations on possible enabling entities, key participants and specific implementation action steps.

An over-arching resolution of adoption is also attached that adopts explanatory language from the Sustainability Committee's policy reports and suggests a City Council charge for an implementation Steering Committee.

Recommendation  

A City Council blessing of these Action Plans and the implementation staff is essential to proceed with actual implementation of the Holland Community Energy Efficiency and Conservation Implementation Strategy. The attached documents contain recommendations on what, how and who to be charged to make a community energy plan a reality.

Respectfully Submitted,

Ryan Cotton  
City Manager
CEP Action Pages for potential Task Forces
July 2012 drafts

It is proposed that the documents enclosed be seen as a framework for an approach to additional study and implementation of recommendations within the CEP. The lead enabling entity for each would take each of these action plans and further develop them with the assistance of possible public/private entities and review them with the HBPW Board and City Council in October 2012. This work will be overseen by a Steering Committee, which is proposed to be comprised of the Holland City Manager and Assistant City Manager, the Holland BPW General Manager and Business Services Director and at least one community member at-large to be designated by City Council.
Holland Community Energy Plan
Summary of possible Action Plans; July 11, 2012 draft

1. **Action Outcome:** Home Energy Retrofit program  
   **Description:** A new and extensive program of home renovation programs specifically targeted to encourage individual homeowners (and landlords) to make energy-saving/conserving changes to their homes.

2. **Action Outcome:** Citywide District Heating program  
   **Description:** A new HBPW service providing hot/warm water to customer building locations to enable building heating (and possibly cooling) as well as snowmelt services. Heated water for this service would be generated during electricity production and would be provided by a network of large insulated hot-water mains and individual pipes serving customer facilities. Sources could be from waste heat provided by electric generating facilities or from private/public non-utility sources with excess capacity.

3. **Action Outcome:** Industrial Services – the “Holland Full Service Utility Bundle”  
   **Description:** A new package of energy-related utilities and services provided by the HBPW to customers in industrial parks, initially, the southside industrial park in the vicinity of M-40. This package of energy services – made possible because of a potential CHP generator in the vicinity - would include present electrical, water, and wastewater services, and might include the following new bundle of services: warm or hot water, cool/chilled water, process steam, compressed air, vacuum, as well as broadband/fiber, which is already available.

4. **Action Outcome:** Building Energy Labeling program  
   **Description:** A comprehensive building energy labeling program that accurately measures and appropriately “publicizes” building energy consumption levels according to national energy standards. Ideally, these energy labels would measure energy usage – by building design as well as actual usage…and be measured periodically by an independent testing organization.

5. **Action Outcome:** Electrical Generation program  
   **Description:** Study and determine the most appropriate source(s) of additional electrical supply capacity for the HBPW to serve customer needs over the next 20-40 years in support of the principles and goals in the CEP.

6. **Action Outcome:** Community Education and Outreach  
   **Description:** This comprehensive CEP education and outreach program would provide current information about the CEP and invite participation as appropriate in various CEP programs and activities.
Holland Community Energy Plan
Action Plan Form
June 11, 2012

Action Outcome: Home Energy Retrofit program

Description: A new and extensive program of home renovation programs specifically targeted to encourage individual homeowners (and landlords) to make energy-saving/conserving changes to their homes.

Application: This program is aimed at individual homeowners (and landlords of residences) throughout the City of Holland. There are over 7,000 such homes in the City and many of them are very energy in-efficient.

Enabling Entity: City of Holland – lead  Holland BPW – support
Other neighborhood-based organizations must also be involved… Churches within initial project neighborhoods can help lead/organize, too

Enabling Mechanisms:
• City and HBPW policies supporting and encouraging this program
• Financing mechanisms to enable these energy-related improvements to be undertaken
• Organizations with technical staff to understand what is needed for each home improvement as well as the appropriate sequence, phasing, and financing strategies to achieve the most energy-effective home retrofit possible.

Possible Entities
City of Holland planning and neighborhood staff
City – OurStreet program staff
HBPW staff
Homecor
Local housing NFP’s, such as Neighborhood Advisory Committee, Habitat, Jubilee, etc
Bankers and mortgage/lending experts
Housing-focused developers, builders, energy consultants

Specific Action Steps Milestone Date:
Meet to conceptualize/frame Mission, Purpose, Goals
Review Garforth concepts and other home/neighborhood- scale project, specifically
• Refine earlier concepts and create new “working framework” for more study
• Create a “smallest scalable/doable neighborhood for early/fast impl. (20 homes pilot)
Review Holland’s Ourstreet and Homecor experience as excellent examples of successful public/private cooperation on (general, not just energy…) renovation projects
Learn about other energy-focused programs in other cities, campuses: via Garforth, etc
Establish short term and medium range Projects and Priorities: For 1-3 years, 4-7 years…
Research opportunities for grant assistance and financing options
Develop budget
Holland Community Energy Plan
Action Plan Form
July 11, 2012

**Action Outcome:** Citywide District Heating program

**Description:** A new HBPW service providing hot/warm water to customer building locations to enable building heating (and possibly cooling) as well as snowmelt services. Heated water for this service would be generated during electricity production and would be provided by a network of large insulated hot-water mains and individual pipes serving customer facilities. Sources could be from waste heat provided by electric generating facilities or from private/public non-utility sources with excess capacity.

**Application:** All buildings - commercial, industrial, institutional, and residential could be served by this new service, limited only by the extent of the hot-water network and the economic feasibility of particular building opportunities.

**Enabling Entity:** City of Holland - support Holland BPW - lead Potential group of “key anchor district heating customers”

**Enabling Mechanisms:**
- City and HBPW policies supporting this new service. An important precedent is the 20+ year policy and provision of warm water to Holland’s Snowmelt system.
- Creation of a new business unit within HBPW to manage this new utility.
- Capital financing mechanisms (revenue bonds)

**Possible Entities**
- HBPW staff
- City of Holland
- Key Institutions such as Hope, Holland Hospital, Aquatic Center, Holland Public Schools
- Neighborhood reps
- District Heating and Snowmelt experts/consultants
- Community members/leaders

**Specific Action Steps**

**Milestone Date:**
- Meet to conceptualize/frame Mission, Purpose, Goals All – as soon as practical
- Review Garforth concepts and other DH work that HBPW has already performed
- Refine earlier concepts and create new “working DH framework” for more study
- Review Holland’s Snowmelt experience and aspirations for possible expansion of service
- Learn about other, similar District Heating programs in other cities, campuses: Garforth+
- Establish short term and medium range Projects and Priorities: Central Avenue project++
- For 1-3 years, 4-7 years, etc…
Continue the examination of an Initial Spine or Loop District Heating system, as described in Central Avenue project documents. Initial “sinks or sources” include the following facilities: Downtown Holland (various larger buildings), Freedom Village, Hope College, City Hall, Herrick Library, nearby Churches, Midtown buildings, Evergreen Commons, Holland Hospital, Holland Aquatic Center, And other possible public/civic institutions and major commercial areas that might be included.
Holland Community Energy Plan
Action Plan Form
June 11, 2012

**Action Outcome:** Industrial Services – the “Holland Full Utility Service Bundle”

**Description:** A new package of energy-related utilities and services provided by the HBPW to customers in industrial parks, initially, the southside industrial park in the vicinity of M-40. This package of energy services – made possible because of a potential combined heat and power (CHP) generator in the vicinity - could include the following new bundle of services: warm or hot water, cool/chilled water, process steam, compressed air, vacuum, along with the presently available electric, water, wastewater and broadband/fiber services.

**Application:** These services would be provided to industrial customers in this (initial) southside location. If successful, later phases of these services could be provided in other areas...

**Enabling Entity:** City of Holland  Holland BPW – lead
Potential group of key anchor customers/users of these services Lakeshore Advantage

**Enabling Mechanisms:**
- City and HBPW policies supporting these enhanced service provisions
- Creation of a new business unit within HBPW to conceptualize and manage this new bundle of energy services.

**Possible Entities**
HBPW staff  
City of Holland staff  
Representatives from potential industrial customers  
Energy, Industry experts/consultants  
Economic Development officials/leaders

**Specific Action Steps**

Meet to conceptualize/frame Mission, Purpose, Goals
Review Garforth concepts and similar work that HBPW might have conceived
Refine earlier concepts and create new “working framework” for more study
Learn about other, similar programs in other cities, campuses
Establish short term and medium range Projects and Priorities: eg. CHP concepts in CEP
For 1-3 years, 4-7 years, etc.
Create business model to support CHP generator
Action Outcome: Building Energy Labeling program

Description: A comprehensive building energy labeling program that accurately measures and appropriately “publicizes” building energy consumption levels according to national energy standards. Ideally, these energy labels would measure energy usage – by building design as well as actual usage…and be measured periodically by an independent testing organization.

Application: all buildings in the City of Holland in the following categories:
- A. municipal/civic/educational/institutional;
- B. commercial shops/services;
- C. industrial/manufacturing/warehouse
- D. Residential – SF, multifamily
- E. Others…

Enabling Entity: City of Holland - lead Holland BPW - support LEED-authorized entity in area to assist

Enabling Mechanisms:
- Policy supporting this energy-conserving activity (may already be in big policy)
- Agency/organization to label & measure; properly trained staff; annual budget
- Measurement standards relevant to Holland/upper Midwest homes and weather…

Possible Entities
City and HBPW officials
Developers/builders – commercial, industrial, residential
Major bldg owners/campuses – Hope, HPS, Downtown owners, Freedom Village, etc
Energy professionals/consultants in the field: DwellTech, Midwest

Specific Action Steps

Meet to conceptualize/frame Mission, Purpose, Goals
Learn about other, similar programs in other cities
Develop our standards for various bldg types
Establish short term and medium range Plans and Priorities
For 1st year, 1-3 years, 4-7 years, etc…
Provide education on labeling methods
Research seed money (Possibly APPA DEED program)
Begin with city-owned facilities as well as other key community facilities such as Hope College, Holland Public Schools, Churches, landmark buildings, etc.
Action Outcome: Electrical Generation program

Description: Study and determine the most appropriate source(s) of additional electrical supply capacity for the HBPW to serve customer needs over the next 20-40 years in support of the principles and goals in the CEP.

Application: HBPW electrical supply capacity
Related considerations: collaboration with MPPA, Zeeland, GHn.

Enabling Entity: City of Holland - deciders  Holland BPW – lead analysis

Enabling Mechanisms:
- Black and Veatch supply studies
- HDR study of generating options using Sustainable Return on Investment approach which includes both financial and non-financial factors in its evaluation.
- HDR community workshop planned to evaluate and prioritize generating option(s)

Possible Entities
- HBPW board and staff members
- City of Holland elected officials and appointed staff
- Mayor’s Task Force members
- National, state, local energy-related organizations
- Consultants (HDR)
- Community members at large

Specific Action Steps | Milestone Date:
--- | ---
HDR hired and RAP process initiated | Fall 2011
Draft HDR report | July 2012
Community Workshop | August 2012
Complete HDR process and report | August/September 2012
HBPW and City Council study sessions | September 2012
HBPW Recommendation to Council | September/October 2012
City Council decision on supply option(s) | October 2012
Implementation |
Holland Community Energy Plan
Action Plan Form
July 11, 2012

Action Outcome: Community Education and Outreach

Description: This comprehensive CEP education and outreach program would provide current information about the CEP and invite participation as appropriate in various CEP programs and activities.

Application: This program is intended to reach and attract all Holland citizens, employers and employees, and the general public, with particular attention to the following sectors of the community: Education, Business, Non-Profit/Helping organizations, and Neighborhoods.

Enabling Entity: City of Holland and the Holland BPW would co-chair this effort.
The Community Foundation of the Holland/Zeeland Area
The Chamber of Commerce
Holland Sustainability Committee

Enabling Mechanisms:
- City and HBPW policies supporting these education efforts
- Build on the successful CEAG and P21 education programs; add deeper engagement.
- Agreements with existing organizations to provide education/outreach services

Possible Entities
City and HBPW staff
Key community organizations such as the Community Foundation, Chamber of Com…
Community education and engagement organizations including but not limited to the Community Energy Advisory Group
Education leaders from area K-12 and centers of higher learning
Other key organizations with civic, religious, helping, and service missions

Specific Action Steps
Meet to conceptualize/frame Mission, Purpose, Goals
Learn about recent/ongoing efforts in the community: EO, P21, CEAG, Garforth pieces,
Learn about other, similar programs in other disciplines: Ready for School, Lakeshore Advantage, Chamber of Commerce outreach,
Establish short term and medium range Plans and Priorities
   For 1st year, 1-3 years, 4-7 years, etc…
Holland Community Energy Plan
Action Plan Form

Action Outcome:

Description:

Application:

Enabling Entity: City of Holland Holland BPW

Enabling Mechanisms:

Participants Entity

Specific Action Steps Milestone Date:
WHEREAS, the Holland City Council, in January 2010, asked the Holland Community Sustainability Committee to research and develop a community energy plan; and

WHEREAS, the Holland City Council and the Holland Board of Public Works approved, and financed, the engagement of a consulting firm, Garforth International, to assist the Holland Community Sustainability Committee in the development of such a plan; and

WHEREAS, a Project Work Team, made up of the consulting team and representatives of the City of Holland, with input from the Holland Board of Public Works, was formed to develop a plan which would meet the following primary goals:

- Ensure economic competitiveness
- Provide reliable and affordable energy
- Protect the environment; and

WHEREAS, the Project Work Team has worked diligently, meeting weekly and arranging for public input and providing interim reports on progress, during the period of January 2011 through September 2011; and

WHEREAS, the Project Work Team presented to the Holland Community Sustainability Committee on September 9, 2011 their report entitled Holland Community Energy Efficiency and Conservation Strategy (Strategy); and

WHEREAS, the Holland Community Sustainability Committee has received and reviewed this Strategy, and has agreed by majority vote that the recommended Strategy:

- Fulfills the request made of the Holland Community Sustainability Committee by Holland City Council;
- Provides a clear, flexible path to meet the primary goals established within a forty-year period;
- Contains specific steps to meet those goals, including five scale projects, seven enabling mechanisms, and numerous recommendations for implementation.

NOW, THEREFORE, BE IT RESOLVED, that it is the intent of the City Council of Holland to evaluate and work through the above-named Community Energy Plan in an incremental, strategic manner to achieve optimum results for the community.

BE IT FURTHER RESOLVED, that one-page implementation statements will be developed by a Steering Committee comprised of the City Manager, Board of Public Works General Manager, Assistant City Manager, Board of Public Works Business Services Director, and at least one community member at-large to be designated by City Council working collaboratively and using community input which will include specific next steps to realize Community Energy Plan’s proposed outcomes; and

BE IT LASTLY RESOLVED, that the above implementation statements will conclude with designation of the primary lead staff, approved by the City Council to implement this incremental, strategic approach to accomplish the Community Energy Plan’s proposed outcomes.

Adopted and Approved this _____ day of ______, 2012.

Attest:

_____________________________  ______________________________
Kurt D. Dykstra, Mayor                        Anna Perales, Deputy City Clerk