

City of Holland

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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

Estimated Time *	Item	Description
5:30 PM	1.	Public Comments (for items not on Agenda).
5:35 PM	2.	Community Energy Plan – Draft Action Plans (6).
6:00 PM	3.	Community Energy Plan Adoption Resolution (Draft).
6:30 PM	4.	Date of Formal Council Meeting to Approve the Community Energy Plan Adoption Resolution and Action Plans.
6:45 PM	5.	Other Business.
6:50 PM	6.	Adjourn (to the Re-scheduled Regular City Council Meeting).

c: Media:
WHTC (616) 392-8066
WJQ (616) 931-1280
Lakeshore (616) 396-9447
Sentinel (616) 392-3526

(‡) 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

Meet to conceptualize/frame Mission, Purpose, Goals

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...

Milestone Date:

All – as soon as practical

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
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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 outhside 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

Milestone Date:

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

Holland Community Energy Plan
Action Plan Form
July 11, 2012

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,

etcEnergy professionals/consultants in the field: DwellTech, Midwest

Specific Action Steps

Milestone Date:

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.

Holland Community Energy Plan
Action Plan Form
July 11, 2012

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

Milestone Date:

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...

MASTER
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:

**HOLLAND COMMUNITY ENERGY EFFICIENCY AND
CONSERVATION IMPLEMENTATION STRATEGY
RESOLUTION # R-_____**

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