Members: Committee Chair Darden Rice, Committee Vice Chair Gina Driscoll, Council Chair Charlie Gerdes, & Council Member Brandi Gabbard

Alternate: Council Vice Chair Ed Montanari

Support Staff: Linnie Randolph

1) Call to Order

2) Approval of Agenda

3) Approval of October 10, 2019 Minutes

4) New Business –November 14, 2019

   a) Continued Discussion on Energy Efficiency, Project Prioritization, & Funding Options
      – Sharon Wright, Brejesh Prayman, Ann Livingston, Liz Makofske & Anne Fritz

5) Upcoming Meeting Dates & Tentative Agenda Items

   December 12, 2019
   a) Report from Legal on HB 1159, City’s ability to enforce tree protection policies
      - Michael Dema
   b) Presentation from legal on language that would allow the City to regulate arborists & establish standards for removal of “dangerous trees”
      - Michael Dema & Heather Judd
   c) Discussion on increasing fines for after-the-fact grand tree removal
      - Elizabeth Abernethy & Jenni Bryla
   d) Mobile Homebuilding codes in coastal high hazard areas
      - Noah Taylor & Don Tyre

General Attachments:
Minutes of the October 10, 2019 HERS Committee Meeting
Pending and Continuing Referral List
New Business Item Support Material
City of St. Petersburg

Health, Energy, Resiliency & Sustainability Committee
October 10, 2019 Meeting Minutes

Sunshine Center Auditorium

Present: Committee Members – Committee Chair Darden Rice, Committee Vice-Chair Gina Driscoll, Council Chair Charlie Gerdes, Council Member Brandi Gabbard, and Council Member Ed Montanari (Alternate)

Also Present: Assistant City Administrator Tom Greene, Assistant City Attorney Michael Dema, Sustainability Director Sharon Wright, Operations Analyst Office of Sustainability Alex Hancock

Support Staff: Linnie Randolph - City Council Legislative Aide

1. Call to Order – 10:54 AM
2. Approval of Agenda – CM Gerdes moved approval, all members voted in favor.

5. Upcoming Meeting Dates & Tentative Agenda Items

CM Rice directs staff and the committee to item 5 stating that due to shortness of time this item is not given full attention at most meetings, so we’ll do it first today. (See full referral list for details)
CM Rice lays out the following dates and priorities to the HERS Referral list:
Items 3, 4 & 5 all regarding trees will be on the December 12, 2019 agenda. Also included on the December 12th agenda is Item 9, mobile home building codes in coastal high hazard areas. Item 2, energy efficiency projects and funding options. On November 14th the committee will hear an in-depth presentation on where we are with these projects.
Item 6, soil moisture, this item can be paused for a little bit as Tampa Bay Water is looking at a conservation plan with a regional approach with some funding that could be available.
Item 7, hurricane mitigation, CM Gabbard requested that this item remain on the list and will follow up with Noah Taylor as to where we are and will report back to the chair.
Item 8, EV prewire in new single-family homes, CM Gabbard will meet with staff to determine if Vision 2050 is a good fit for this item. Sharon Wright also stated that this item is part of the Bloomberg American City Climate Challenge. CM Gabbard will gather information and report back to Chair Rice once the best fit is determined for this item.
Item 10, herbicide/pesticide use, CM Driscoll stated that the County formed a taskforce for this specific issue and City staff members (Mike Jefferies) are participating. CM Driscoll asked for more time while this taskforce meets a few times to see where we are. CM Driscoll will report back with their findings.
Item 11, User fee for single use plastic bags, Sharon Wright stated that we should hold off on this one until 2020 when the straw ban is in full enforcement. CM Rice agreed and will review next year.
3. Approval of September 12, 2019 Minutes – CM Gabbard moved approval, all members voted in favor.

4. New Business for October 10, 2019
   Update on Business Outreach: Polystyrene & Single Use Plastic Straws Ordinance
   – Sharon Wright & Alex Hancock

   Sustainability Director Sharon Wright began by introducing Alex Hancock, the city’s Operations Analyst from the office of Sustainability. Ms. Wright explained that the presentation will show the success of their business outreach regarding the upcoming ban on polystyrene and single use plastic straws. Ms. Hancock began the presentation by stating that they have met the goal of reaching every affected business with the help of Suncoast Rise Above Plastics Coalition volunteers. As Ms. Hancock walked through the presentation explaining how the outreach process was conducted. The city was broken out by district with every affected business in each district identified. Distributers and Suppliers were also identified and were contacted to make sure these groups are aware and comply with City Code regarding the products their clients have access to order. The biggest concern for business owners is the cost for switching to non-plastic products. Most of this has been alleviated by moving to the request only approach.

   CM Gabbard asked Ms. Wright if she’s out and served a straw without requesting can she call to see if that restaurant has been visited in person to go over the plastic ordinance. Per Ms. Wright, Yes, please call us. This is an ongoing process and we’re happy to revisit any place that needs more information. Ms. Wright also stated that they are following up with multilingual business and creating materials in other languages. Ms. Hancock explains that all zoning permits are done in person, so each person is reminded as they renew as to the restriction of the ordinance.

   Ms. Hancock explains the next steps in the education process and announces two workshops for alternative products and bulk purchases. The St. Pete Chamber will host a workshop on Tuesday, November 19th at 5:00pm and the St. Pete Green House will host on Friday, November 22nd at 10:00am.

   Ms. Hancock details three revisions they feel need to be added to the current ordinance.
   1. Clarification to include Tropicana Field, Al Lang Stadium, the new St. Pete Pier, Albert Whitted Airport, and all Enterprise Properties under the EPS code.
   2. Maintain request-only requirement for all straws, with an exemption for drive-throughs until there are more common solutions with lids or other changes.
   3. Allow businesses to maintain a small stock of plastic straws for customers with a medical need.

   CM Driscoll states her concern with the strong focus on straws that many may not know about the restrictions on all of the other EPS plastics. Ms. Hancock says that yes, there was some confusion about this. Sidewalk cafes are greatly affected by this ban. We include this information in the sidewalk café zoning notices. Staff at the renewal counter has stated that they
are getting questions about this. Education and outreach is something we plan to continue through out the year.

CM Rice acknowledged the great work and outreach by St. Anthony’s hospital with their “last straw” marketing campaign stating this was no doubt in response to the city’s ordinance leading the way.

At this time CM Rice asked the committee members to consider the three revisions to the ordinance asked for during the presentation. CM Gabbard motions for approval.

Ms. Wright then asked for an additional (4th) revision to include a full definition of PLA plastics stating that this is not an acceptable replacement for request only use.

CM Rice reviews each one of the revisions with Ms. Wright stating that the motion is to move approval to report to Council. The committee voted unanimously to move the four revisions to full Council.

The revised ordinance will return to full Council at the November 7, 2019 meeting with adoption on November 14, 2019. Ms. Wright will also give the report to full Council on November 7, 2019 per the commitment to Council.

Michael Dema gave a brief update on the Pensacola case (HB1159) regarding local government from enacting tree protection ordinances. Per Michael we are waiting for the circuit court judge to make a decision. Mr. Dema will continue to monitor and give an update at the next HERS meeting.

*Committee Chair Rice adjourned the meeting at 11:46 AM*
MEMORANDUM
City of St. Petersburg HERS Committee
Meeting of November 14, 2019

To: The Honorable Darden Rice, Chair and Members of the HERS Committee
Date: November 8, 2019
Subject: Energy Efficiency and Renewable Energy for City Facilities: Overview/Recap, Draft Final Approach, and Resolutions for Finance Structures

Purpose and Overview

This purpose of this memorandum is to recap building energy efficiency and renewables program topics previously discussed and to propose a Revolving Energy Investment Fund (REIF) for the City of St. Petersburg to fund energy efficiency and renewable energy projects at City facilities on an ongoing basis.

What is a Program for Existing City Buildings?

In general, renovations, retrofits, and improved operational practices are included in a Program that will improve the energy performance of the city building assets and avoid costs over the long-term. System improvements, including lighting HVAC, water heating performance improvements and controls are examples of common initial steps for increasing building efficiency. Envelope improvements may include energy-saving roofs, walls, windows, and doors. Deep dives include monitoring, commissioning, retro-commissioning, and milestone adjustments. In addition to maximizing energy efficiency options, renewables like solar photovoltaics (PV) can be added to reduce greenhouse gas emissions. Behavior change (e.g., turning off lights and equipment when not in use) can also result in significant energy and cost savings.

Improvements are prioritized as much as possible for cost/benefit to optimize payback. Programs are developed with the goal of energy cost savings being used to pay back upfront costs and/or debt.

Energy Efficiency for City Buildings – Program Development Progress

In 2017, staff developed a suggested retrofit program for facilities using historic audits and work orders, Energy Star Portfolio Manager software and site visits to over a dozen facilities including recreation centers, fire stations, and the main library. Based on a simple square footage (sf) extrapolation for all existing buildings, not including water reclamation plant facilities, staff estimated that the City could
have up to a $28 million initial program in energy efficiency and renewable energy related projects (2017 dollars).

In September of 2019, staff provided an update on progress to date as well as a proposed framework for accelerating the development and implementation of an energy program for the City. For more detailed background information on progress prior to the September 2019 HERS, please see the attached memo from that committee meeting.

Since the September 2019 HERS Committee, the City Team has put together potential projects list along with funding options and years. The list is still draft and being coordinated with departments and the Capital Improvements Plan. The City Team has also worked through current available funds as part of Budget Clean Up and other mechanisms for starting more energy efficiency and renewable energy work through energy performance contracting methods and a way to set up a Revolving Energy Investment Fund (REIF) under the city’s current organizational and financial structure. A resolution that would enable the city to set up a REIF structure is included in this package with an action request for review and recommendation for approval.

Finally, with City Council input, Administration has asked for a justification for an energy professional position. The Energy Analyst position can realize reductions in energy consumption, cost savings, and environmental benefits through energy efficiency, demand reduction, renewable energy, utility bill analysis, and conservation (behavior change). Further, the savings realized by a dedicated position and collaborating departments will likely more than offset the burdened costs of the new position. That work is in progress.

What Funding Approach Alternatives May be Possible for a New Program?

The FY 2020 Adopted Budget includes approximately $975,000 in projects relating to lighting and HVAC that will improve energy efficiency. The adopted budget also mentioned a $2 million green bond as part of possible energy efficiency program development funding solutions. During the FY19/FY20 Cleanup process, $1 million from the FY19 operating surplus and $1 million in fund balance in the Neighborhood & Citywide Infrastructure Fund (CIP) from project closeouts and additional interest earnings revenue was identified for green infrastructure/energy efficiency projects in lieu of using bond proceeds at this time. This action will go to City Council for approval as changes to the Second Reading of the FY19/20 Cleanup Ordinance at the Public Hearing on November 18, 2019. The proposal and the draft list below represent the City’s commitment to creatively consider and propose funding solutions as part of ISAP and Bloomberg American Cities Climate Challenge commitments.

- General Fund (capital and operations)
- Revolving Investment Fund—City funds are invested in energy improvements at City facilities, savings from those improvements are returned to the fund so that projects can be funded on an ongoing basis from a dedicated fund
- Bonds
- Lease (e.g., solar PV and other equipment)—can reduce upfront costs, stabilize utility bills, allow the capture of tax credits, and include operations and maintenance services
- Partnership with energy service company (ESCO) to implement improvements with little or no upfront costs to the City—repaid through estimated savings (includes service and financing fees)
Pay for performance (Energy Services Agreement (ESA))—contractual arrangement that allows for very little to no upfront investment and typically includes equipment and maintenance (includes service and financing fees)

Grants when available

Proposed 2020 Energy Efficiency Program Set Up & Financing Approaches

Project Set 1 – Self-funded and Public/Private Collaboration

Project Set 1 will include three components—self-funded, pay for performance, and solar leasing. Some energy efficiency focused projects can be funded through the REIF, Penny for Pinellas funds, and general fund—others can be funded through an ESA contractor. All energy efficiency projects will include some level of energy audits, savings analysis (cost and energy), and upgrades to features like lighting, controls, HVAC, and building envelope.

REIF projects will be directly funded through the REIF and other City funds—savings from those projects will repay the City’s investment and replenish the fund. ESA projects will include working with an ESA contractor who will require little or no upfront financial obligation and will be paid a percentage of the documented energy saved on their work—they will audit the facility, fund the improvements, and maintain the improvements for the life of the agreement.

Solar leasing allows the City to indirectly capture the benefits of the investment tax credit as well as have the systems designed, installed, and maintained by a third party for the life of the agreement. Solar leasing allows for little to no upfront costs on the part of the City and generally favors larger PV systems.

Project Set 2 – Bond and General Fund

Project Set 2 has similar projects to Project Set 1, but is anticipated to be city-funded and primarily managed in house as the energy program structure and internal resources progress in terms of structure, staffing, fund allocation, experience, training, and similar. Project Set 2 type efforts are expected to continue on an ongoing basis and will be implemented concurrently with Project Set 3.

Project Set 3 – Comprehensive Retrofits and Net Zero Energy Facilities

Project Set 3 will include larger projects (likely one to two) to be managed by the City Team. As mentioned above, funding included in the FY19/20 Budget Cleanup Ordinance (if approved on 11/18/19) has provided an opportunity to start right away on design for larger projects on one to two sites. Under consideration for priority are Thomas Jet Jackson (TJJ) and Main Library Building Renovations approaching Net Zero Energy.

Process for REIF Implementation

The REIF may be set up administratively and will allow the city to begin to shift approaches for a more comprehensive way to approach energy efficiency and renewable energy funding. Funding the REIF will require City Council support of budget cleanup ordinance which includes a provision for funding the REIF.
Action Requested

1. Support administration in the establishment of the REIF.

2. Consider and recommend City Council for approval of the changes to the Second Reading of the FY19/20 Cleanup Ordinance at the Public Hearing on November 18, 2019 that include a provision for funding REIF.

3. Support City Team move forward on the 2020 Proposed Energy Efficiency and Funding Programs and that the City Team bring back specific project priorities to HERS or other appropriate Committee and City Council on an ongoing basis.

Materials Included

- Preliminary/Draft slides for November 2019 HERS Committee
- September 2019 HERS Committee Cover Memorandum
Overview

• Energy Efficiency & Renewables Program development progress

• Revolving Energy Investment Fund (REIF) – defined & proposal

• Action requested
Why Energy Efficiency for City Facilities?

- Energy Performance: investing in the city, investing in the future
  - Reduce operating costs now and in the future
  - Clean, healthy work environment
- Energy jobs
- Drive market – lead by example
- Commitments: ISAP + American Cities Climate Challenge + many more

Program Development Goals

- Reduced energy use and associated costs, increased renewable energy supply, and realization of non-energy benefits (e.g., indoor air quality)
- Near-term: high impact, cost-effective projects with currently available funding mechanisms
- Long-term:
  - Build capacity (energy manager and across depts)
  - Develop a program structure that remains sustainable and innovative through interdepartmental collaboration and strategic use of private sector and other partners
Energy Story – 2000s

Energy Efficiency & Conservation Block Grant

• Audits
• Retrofits
• Rebates
• Pilot solar
• Capital Improvements
• Operations – replacements/upgrades

Energy Story – continued

• Capital Improvements
• LEED – certified buildings
• Deferred and regular maintenance
• Lacking consistently centralized implementation, training
  • Example - lighting
Program Concept (1)

• Incrementally centralize facilities management approach
• Complete facility condition assessments
• Fund EE investments (multiple approaches) and strategically utilize savings
• Proactively manage assets over long term
  • Replacements & improvements
  • Implement field-tested strategies
    • Controls, submeters, tracking, monitoring, adjustments
• Staff training across departments– Energy Star Portfolio Manager
  • Behavior changes, O&M collaboration & guidance
• Add staff resources: Energy Analyst (not currently budgeted)
• Partner with institutions and energy providers

Program Concept (2)

• Project Set 1 – Self-funded and public/private collaboration
• Project Set 2 – Bond and general fund
• Project Set 3 – Comprehensive Retrofits and Net Zero Facilities
Program Concept (3)

2020 Project Priorities – In Progress Analysis

- High consumption facilities (relative to similar facilities)
- Scheduled work—increasing energy efficiency and renewable energy measures
- Known issues—impending replacements and similar
- Departmental priorities
- Cost-effectiveness of potential upgrades
- Ability to bundle projects
- Funding options

How Will We Know the Investments are Working?

- Improved data gathering, analysis, tracking
  - Sustainable staff resources needed
- Reporting
  - OSR, St. Pete Stat, REIF sustained
- Advanced Metering Infrastructure (AMI)
  - Duke Energy Florida (DEF)
- Additional collaborations and data improvements - DEF

- Other benefits – indoor air quality + more
Funding: Options Under Evaluation

Intent is to strategically apply funding options to projects based on the best match:

• General fund
• Bonds (including Green Bonds)
• Energy Service Agreements (pay for performance)
• Solar Lease
• Revolving Energy Investment Fund (REIF)

Revolving Energy Investment Fund (REIF) Objectives

• Reduce and avoid City electricity costs long-term
• Waste less energy and money powering buildings
• Set example – encourage better building practices
• Achieve non-energy benefits (e.g., improved indoor air quality)
• Meet energy efficiency and clean energy commitments
REIF Framework (1)

- Internal Service Fund (expansion of Municipal Office Buildings)
- Limited to general fund facilities and departments (not enterprise funded efforts)
- Can be seed funded from multiple sources (e.g., unspent CIP funds, general fund allocation, etc.)
- Departmental contributions may also contribute to the REIF

REIF Framework (2)

- Funds specified efficiency and renewable energy measures
- Not intended for projects that are already funded or new construction (administrative criteria under development)
  - Must meet ROI requirements
- Subject to review, projects with multiple funding awards may be eligible to participate in the REIF
REIF Framework (3)

• Funds are repaid based on actual avoided utility costs (based on utility billing):
  • 90% of avoided costs are transferred to REIF (provides security in the event some savings are due to weather anomalies or similar)
  • 110% of project costs are repaid (to offset impacts of inflation)
  • Rebates and incentives may also be directed to the REIF
• Once investment is repaid, avoided costs may be directed to various City priorities

Action Requested

1. Support administration in the establishment of the REIF.
2. Consider and recommend City Council for approval of the changes to the Second Reading of the FY19/20 Cleanup Ordinance at the Public Hearing on November 18, 2019 that include a provision for funding REIF.
3. Support City Team move forward on the 2020 Proposed Energy Efficiency and Funding Programs and that the City Team bring back specific project priorities to HERS or other appropriate Committee and City Council on an ongoing basis.
MEMORANDUM
City of St. Petersburg HERS Committee
Meeting of September 12, 2019

To: The Honorable Darden Rice, Chair and Members of the HERS Committee

Date: September 5, 2019

Subject: Energy Efficiency & Retrofits of Existing City Buildings Program Development: Overview, steps taken, next steps, and budget discussion

Energy Efficiency & Retrofits of Existing City Buildings Program

Purpose and Overview
This purpose of this memorandum is to level set on what a building energy efficiency and renewables program generally looks like, to propose an energy efficiency program concept for the City of St. Petersburg, and to discuss related budget and funding items. This memo also provides a refresher of the steps taken and funding provided for energy efficiency and solar PV for city facilities since the program was first discussed by the HERS Committee in 2016 up to the currently proposed FY 2020 budget.

Finally, this memo includes an explanation and a request for reallocation of a portion of BP Settlement funding from the County Vulnerability Assessment partnership to energy efficiency work and to cover some additional consultant costs for the Integrated Sustainability Action Plan (ISAP).

What is a Program for Existing City Buildings?
In general, renovations, retrofits, and improved operational practices are included in a Program that will improve energy performance of the city building assets and avoid costs over the long-term. Behavior changes and system improvements including lighting HVAC, water heating performance improvements and controls are examples of common initial steps for increasing building efficiency. Envelope improvements may include energy-saving windows, doors, roofs, and walls. Deep dives include monitoring, commissioning, and milestone adjustments. Once energy efficiency is maximized, renewables like solar can be added to get to net zero energy buildings.
Improvements are prioritized as much as possible for cost/benefit to optimize payback. Programs are developed with the goal of energy cost savings being used to pay back upfront costs and/or debt.

**Why Develop an Energy Efficiency Program for Existing City Buildings?**

Did you know that most of the air pollution and greenhouse gas (GHG) emissions and a significant amount of water used across the City of St. Pete comes from powering our buildings? Since the purchase of electricity for City buildings and other facilities is the largest contributor to the City’s overall emissions, reduction in electricity purchase represents the greatest opportunity for cost-savings and emissions reduction.

The city completed a series of energy audits for its facilities, but the majority of these were completed nearly a decade ago. The ISAP recommends completing energy audits that reflect current conditions at its portfolio of facilities and incorporating any resulting recommendations into an energy efficiency and/or capital improvement program.

The city has also made a commitment to shift away from energy that is generated through the burning of fossil fuels towards investments in clean, renewable energy. Implementing projects to make our buildings more energy efficient means less energy and money is wasted through the process of powering the building while encouraging and setting an example for green building practices. By pursuing these goals, the City will curb waste, save money over the long term, create new jobs, and support a cleaner, healthier environment.

**City Program Concept & Goals**

*Background*

In 2017, staff developed a suggested retrofit program for facilities using historic audits and work orders, Energy Star Portfolio Manager software and site visits to over a dozen facilities including recreation centers, fire stations, and the main library. Based on simple square feet (sf) extrapolation for all existing buildings not including water reclamation plant facilities, staff estimated that the City could have up to a $28 million initial program in energy efficiency and renewable energy related projects (cost estimates in 2017 dollars).

*Proposed Program Implementation – what is needed?*

**Investing in City Facilities**

Fund an initial phased investment of $28 million over 5-8 years (rough cut estimates) to set a solid foundation for an ongoing Energy Program. This initial investment can be fulfilled using existing city funding supplemented with a bond and/or other financing options. The historic and post-improvement energy consumption and energy costs will be tracked to measure the impact of the investments in City facilities. The avoided costs will be used to pay back any debts and otherwise will be used to support the energy program and be reinvested in energy projects impacting City facilities (with some possibly going back to the general fund or to participating departments).

**Centralized Focus on Achieving City Goals, including ISAP and Challenge Commitments**

In addition to the need to invest in physical assets, the City should consider evolving its organizational structure and staffing to successfully implement an energy program and achieve its goals. The City is
Currently largely de-centralized in terms of facilities management and does not have a dedicated mechanical engineer or other energy professional focused on city facilities to meet the City’s energy related commitments as well as its environmental and fiscal goals related to energy.

The City can facilitate achieving its goals through the hire of an Energy Manager. The Energy Manager can realize reductions in energy consumption, cost savings, and environmental benefits through energy efficiency, demand reduction, renewable energy, utility bill analysis, and conservation (behavior change). Further, the savings realized by the Energy Manager and collaborating departments will likely more than offset the burdened costs of the new position.

What does this program and the program goals get us to?

Implementation of a full program will accomplish most of Pathway 1 on the City’s Clean Energy Roadmap: Advance Energy Efficiency in Existing Buildings. Once maximized, milestone maintenance and adjustments would be the ongoing costs. This program is part of an overall approach to procure clean energy through collaboration, be prepared for the innovations and opportunities of the future including a smart and resilient energy system and efficient infrastructure.

What Funding Approach Alternatives May be Possible for a New Program?

The currently proposed FY 2020 budget includes approximately $975,000 in projects relating to lighting and HVAC that will improve energy efficiency. The proposed budget also mentions a $2 million green bond as part of possible energy efficiency program development funding solutions. The proposal and the draft list below represent the City’s commitment to creatively consider and propose funding solutions as part of ISAP and Bloomberg American Cities Climate Challenge commitments.

- General Fund (capital and operations)
- Bonds
- Lease (e.g., solar PV and other equipment)—can reduce upfront costs, stabilize utility bills, allow the capture of tax credits, and include operations and maintenance services (potentially off-balance sheet)
- Energy Savings Performance Contracts (ESPC)—partnership with energy service company (ESCO) to implement improvements with little or no upfront costs to the City—repaid through estimated savings (includes service and financing fees)
- Energy Services Agreement (ESA)—pay-for-performance, potentially off-balance sheet arrangement that typically includes equipment and maintenance (includes service and financing fees)
- “Sustainability as a Service”—behavior change related services, typically pay-for-performance structure (includes service, software, and other fees)
- Grants when available

City’s Energy Efficiency Analyses and Work 2016 to Now

Resources for a substantial ($5 - $7 million) Phase 1 program have not been available in city budget in 2016 - present. Understanding budget limitations, in 2017, staff developed and presented a smaller Phase 1 request of $3.25 million to do work that would save $326,000/yr with a simple payback of 10 years and positive cash flow after 8 years.
Limited Phase 1 funding was also not available for a smaller programmatic start, but some funding from BP was made available in different amounts over the 2016-2017 calendar years. The city also received its Qualified Energy Conservation Bond (QECB) allocation for solar PV on capital projects (see Funding/Allocations table below).

### Funding/Allocations

<table>
<thead>
<tr>
<th>Energy Efficiency &amp; Solar PV Funds</th>
<th>Allocation Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP Allocation # 1 - 2016</td>
<td>$250,000</td>
</tr>
<tr>
<td>BP Allocation # 2 - 2017</td>
<td>$327,296</td>
</tr>
<tr>
<td>QECB Allocation - 2017</td>
<td>$300,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$877,296</strong></td>
</tr>
<tr>
<td>QECB Remaining</td>
<td>$26,030</td>
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<tr>
<td>QECB Interest Earnings</td>
<td>$39,470</td>
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<tr>
<td><strong>Subtotal Remaining 2019</strong></td>
<td><strong>$65,500</strong></td>
</tr>
<tr>
<td>Grand Total w/QECB Interest</td>
<td><strong>$916,766</strong></td>
</tr>
</tbody>
</table>

- **2019 Request BP County VA $ transfer** | $275,000
- **2019 Revised Grand Total (if approved)** | **$1,191,766**

*$300,000 BP transfer (Request City Council approve $25,000 ISAP budget to cover additional consultant costs and $275,000 to continue energy efficiency projects)

### Energy Efficiency and Solar PV Activities and Projects to Date with $877,296

The following list summarizes work completed and in progress with funding allocations listed above:

- Convening of “working” energy technical group of staff from across departments – paused, but plans to restart 2020 or sooner
- 1 time - energy data entry Portfolio manager – Engineering & Capital Improvements Dept.
- Engineering design fees + USF Clean Energy Research Center consult ($15,000 2017; $0 2019)
- North Shore lighting upgrades
- Basis of Design for solar expansion on Thomas Jet Jackson (TJJ) Recreation Center including energy efficiency measures (HVAC, roof)
- Survey and tie in existing solar (solar improvements)
- Solar PV new construction
  - Police Department Headquarters (Green Globes level TBD)
  - Police Training Center (LEED Silver)
  - Fossil Park Fire Station #7 (thin film solar installed, 3 Green Globes)
  - TJJ or other facilities pending final analysis, costs, and funding
**2020 Energy Efficiency Planned Investments and Proposed Funding**

The following two lists summarize currently planned project investments and other resources with available funding as well as proposed or possible additional funding sources:

**Funding Resources**

- Remaining BP/QECB on the following projects:
  - Solar panel design improvements – multiple facilities
  - Prioritized facility improvements – TBD (if reallocation request below is approved)
- Current 2020 Capital Funding – Proposed Budget
  - $974,630 (HVAC, Air Curtains, PV)
  - Possible energy efficiency features within other projects like Jamestown Renovations
- Proposed 2020 financing
  - $2 million financing mechanism (bond or other)
  - Possible value engineered savings (cash from general fund if available)

**Staff and Other Resources**

- Senior energy professional will be transferred to Real Estate & Property Management Department with initial focus on asset management development
- Coming Soon! Water Resources Department will post a position for an analyst to implement sustainability and energy efficiency for their operations
- Bloomberg ACCC Climate Advisor – data collection, analysis, programming for tracking
- Use of 2019 USF Clean Energy Research Center consulting for project development
- TBD – Energy Manager Hire (not currently budgeted) ALL

**Reallocation of BP Settlement Funding Request for Energy Efficiency and ISAP Completion**

**Background**

In 2015/2016, $1 million of BP Settlement funds was proposed to fund vulnerability modeling and resiliency planning. It was discovered that Pinellas County was also setting aside a large sum of RESTORE Act funding to do something similar for the entire county. As a result, the City’s BP Settlement allocation was reduced to $300,000 to hold for partnership with the county. It was foreseen that the city may want to use the county’s model to run additional climate and sea level rise scenarios focused on St. Pete areas. Since that time, the county’s project incurred several delays while St. Pete Public Works went forward with projects to develop the Integrated Water Resources Master Plan including a Stormwater Master Plan which included modeling for projected sea level rise and other climate effects.

Once in place, the City will likely still want to fund a partnership with the County’s larger Vulnerability Assessment Model, but administration thinks it makes sense to use the BP Settlement funding sooner for needed projects in the meantime.

Separately, but related, at project closeout in 2019, consultant costs for the recently completed Integrated Sustainability Action Plan (ISAP) exceeded the original budget of $247,450 mainly due to an extended schedule duration. The project schedule was scoped for a duration of 16 months from
execution of Agreement to delivery of Final ISAP documentation. Due to reasons outside the control of the team, including 2017 elections that delayed outreach and engagement efforts and unforeseen staff workload changes, the project lasted 20 months (August 2017 to April 2019). Originally, City Council review and approval was originally targeted for the end of 2018, but adjusted month-by-month until the April 18th Council date to account for internal City review and HERS Committee review and approval. The actual project timeframe increased 25% from the original project schedule. This was the city’s first planning effort of this type while a great deal of other work, including grant applications, was also occurring simultaneously. In addition, extra efforts were made on the outreach piece of the ISAP to be as inclusive as possible. For these reasons, Administration is asking for part of the reallocation to cover additional consultant costs.

Reallocation Request

Because it has been difficult to fund energy efficiency, Administration is asking City Council to reallocate $275,000 of the $300,000 of BP Settlement funding to continue energy efficiency projects currently underway while other shovel-ready projects are prioritized for possible bond or other financing for a more programmatic energy efficiency program.

For the reasons above, Administration is asking City Council to reallocation $25,000 of the $300,000 of BP Settlement funding to cover additional consultant costs for completion of the ISAP. BP funding was the original funding source for this work.

ACTION REQUESTED

1. Provide initial feedback on program development and funding pathways presented. Staff would like to bring back additional information and a funding proposal for “shovel-ready” projects.
2. Consider and recommend approval to City Council a reallocation of BP Settlement Funding:
   - $275,000 to cover current solar and other energy project cost gaps and prioritize for “shovel-ready” projects for energy efficiency
   - $25,000 to cover ISAP additional costs mainly due to schedule extension

MATERIALS INCLUDED

-Preliminary/Draft slides for committee meeting
Overview

• What is an Energy Efficiency & Retrofits for City Facilities Program?
• Program concept for St. Pete
• Funding approach alternatives for a new program
• Refresher on analysis, funding and activities to date
• 2020 Outlook
• BP Settlement funding reallocation request
What is an EE Program for City Facilities?

- Facility assessments/audits – Level III or enough to assure payback savings
- Analysis
- Energy performance improvement features/projects

Energy Efficiency Facility/Buildings Program – References

- [https://betterbuildingssolutioncenter.energy.gov/](https://betterbuildingssolutioncenter.energy.gov/)
- [https://betterbuildingsinitiative.energy.gov/challenge/goal-achievers](https://betterbuildingsinitiative.energy.gov/challenge/goal-achievers)
- Orlando Greenworks Better Buildings Program
- Raleigh, NC
  - [https://www.raleighnc.gov/environment/content/AdminServSustain/Articles/RenewableEnergy.html](https://www.raleighnc.gov/environment/content/AdminServSustain/Articles/RenewableEnergy.html)
- Arlington, VA
  - [https://environment.arlingtonva.us/energy/county-operations/](https://environment.arlingtonva.us/energy/county-operations/)
Why Energy Efficiency for City Facilities?

Municipal GHG emissions by sector, 2016 (%)

- Buildings and Facilities: 49%
- Vehicle Fleet: 14%
- Employee Commute: 8%
- Waste Water Process: 9%
- Solid Waste: 20%
- Waste Water: 9%

Why Energy Efficiency for City Facilities?

Reduce and avoid city electricity costs long-term

*update graphic for formal 9/12 presentation*
Why Energy Efficiency for City Facilities?

- Clean, healthy environment
- Energy jobs
- Drive market
- Energy performance improvement features/projects
- Commitments: ISAP + American Cities Climate Challenge + many more

Program Concept

- Facility assessments
- Fund energy efficiency investments
  - If debt, structure program and budget/finance to pay back with costs avoided
- Controls
- Regular tracking, monitoring, adjustments
- Centralize facility upgrade approach as much as makes sense with resources – program management
- Staff training across departments – Energy Star Portfolio Manager, behavior changes
- Partner with institutions and energy provider
Funding Approach Alternatives & Considerations

- General fund
- Grants
- Lease
- Performance contracts
- Energy service agreements
- +more

Energy Efficiency – Related Work Since 2016 (City Facilities)

Summary
- Convening of “working” energy technical group
- 1 time - energy data entry Portfolio manager
- Engineering design fees + USF Clean Energy Research Center consult ($15,000 2017; $0 2019)
- North Shore lighting upgrades
- Basis of Design for solar expansion on Thomas Jet Jackson (TJJ)
- Survey and tie in existing solar (solar improvements)
- Solar PV new construction
  - Police Department Headquarters (Green Globes level TBD)
  - Police Training Center (LEED Silver)
  - Fossil Park Fire Station #7 (thin film solar installed, 3 Green Globes)
  - TJJ or other facilities pending final analysis, costs, and funding
2020 Energy Efficiency Planned Investments

Funding Resources

• Remaining BP/QECB on the following projects:
  • Solar panel design improvements – multiple facilities
  • Prioritized facility improvements – (pending reallocation request)

• Current 2020 Capital Funding – Proposed Budget
  • $974,630 (HVAC, Air Curtains, PV)
  • Possible energy efficiency features within other projects like Jamestown Renovations

• Proposed 2020 financing
  • $2 million financing mechanism (bond or other)
  • Possible value engineered savings (cash from general fund if available)

Staff and Other Resources

• Senior energy professional will be transferred to Real Estate & Property Management Department

• Coming Soon! Water Resources analyst position

• Bloomberg ACCC Climate Advisor* – data collection, analysis, programming for tracking

• Use of 2019 USF Clean Energy Research Center consult

• TBD – Energy Manager Hire (not currently budgeted)
Funding Reallocation Request

- Reallocate $300,000 BP Settlement funding from County Vulnerability Assessment
  - Build on energy efficiency and renewables program development and “shovel ready” projects
  - ISAP Consultant Costs – Close out

<table>
<thead>
<tr>
<th>Energy Efficiency &amp; Solar PV Funds</th>
<th>Allocation (in $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP Allocation #1 - 2016</td>
<td>$250,000</td>
</tr>
<tr>
<td>BP Allocation #2 - 2017</td>
<td>$527,296</td>
</tr>
<tr>
<td>QECB Allocation - 2017</td>
<td>$300,000</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$877,296</td>
</tr>
<tr>
<td>QECB Interest Earnings</td>
<td>$55,470</td>
</tr>
<tr>
<td>Subtotal Remaining 2019</td>
<td>$932,766</td>
</tr>
<tr>
<td>Grand Total w/QECB Interest</td>
<td>$1,088,766</td>
</tr>
<tr>
<td>2019 Request BP County VA $ transfer*</td>
<td>$275,000</td>
</tr>
<tr>
<td>2019 Revised Grand Total (if approved)</td>
<td>$1,363,766</td>
</tr>
</tbody>
</table>

BP Settlement Funding

| Energy Efficiency Schools Facilities | $337,296 | $0.00 | $337,296 |
| Waterfront Pipe Relining Repair     | $782,323 | $2,000,000 | $0.00 | $0.00 | $247,296 |
| 2019 Revised Grand Total (if approved) | $1,191,766 |  

SUMMARY OF BP APPROPRIATIONS

<table>
<thead>
<tr>
<th>Third Quarter FYP</th>
<th>BP Project</th>
<th>Total Appropriation</th>
<th>Total Expenditures</th>
<th>Encumbered</th>
<th>Amount Unspent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Efficiency Schools Facilities</td>
<td>$337,296</td>
<td>$0.00</td>
<td>$337,296</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterfront Pipe Relining Repair</td>
<td>$782,323</td>
<td>$2,000,000</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$247,296</td>
</tr>
</tbody>
</table>

Beginning Balance of BP Resources: $4,577,884
Unappropriated Balance of BP Resources: $0.00
Appropriated but Unspent: $883,136
Appropriated and Spent: $3,882,444.50
Appropriated and Encumbered: $1,213,124.49
Total BP Resources: $4,577,359.99
<table>
<thead>
<tr>
<th>Topic</th>
<th>Return Date</th>
<th>Prior Meeting</th>
<th>Referral Date</th>
<th>Referred By</th>
<th>Staff</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continued discussion of energy efficiency projects &amp; funding options</td>
<td>11/14/2019</td>
<td>7/26/2018</td>
<td>9/15/2016</td>
<td>Driscoll/Nurse</td>
<td>Sharon Wright, Ann Livingston Brej Prayman</td>
<td>9/12/19 – BP reallocation approved to continue energy efficiency projects. Continued discussion of energy efficiency projects &amp; funding options scheduled for 11/14/19</td>
</tr>
<tr>
<td>Indebth presentation on where we are</td>
<td></td>
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<tr>
<td>Report from Legal on how HB 1159 will affect the City’s ability to</td>
<td>12/12/2019</td>
<td>8/22/2019</td>
<td>7/18/2019</td>
<td>Rice</td>
<td>Michael Dema</td>
<td>8/22/19 – Legal to return with update once the court decides on the case in Pensacola. Will address definition for “dangerous trees” at that time.</td>
</tr>
<tr>
<td>enforce tree protection policies, such as tree removal permits &amp;</td>
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<tr>
<td>re-planting requirements</td>
<td></td>
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<tr>
<td>Presentation from legal on language that would allow the City to</td>
<td>12/12/2019</td>
<td>8/22/2019</td>
<td>8/15/2019</td>
<td>Rice</td>
<td>Michael Dema, Heather Judd</td>
<td>8/22/19 – Legal to return with draft form that a tree company and/or certified arborist will be required to sign before use of the city brush site, with a specific focus on language for the removal of trees deemed “dangerous.”</td>
</tr>
<tr>
<td>regulate tree protection policies</td>
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<tr>
<td>&amp; establish standards for removal of “dangerous trees”</td>
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</tr>
<tr>
<td>Discussion on increasing fines for after-the-fact grand tree</td>
<td>12/12/2019</td>
<td>8/22/2019</td>
<td>4/4/2019</td>
<td>Rice</td>
<td>Liz Abernethy, Jenni Bryla</td>
<td>8/22/19 – Staff to return with more details on the after-the-fact fee matrix, how the matrix relates to maximum penalties &amp; trunk inch to dollar calculations.</td>
</tr>
<tr>
<td>removal</td>
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<tr>
<td>Potential ordinance to encourage the use of soil moisture sensors &amp;</td>
<td>Tabled</td>
<td>7/26/2018</td>
<td>9/9/2017</td>
<td>Driscoll/Nurse</td>
<td>Sharon Wright, Liz Abernethy, Chris Claus</td>
<td>8/9/18 - Sharon Wright indicated that the Zoning Department can consider “soil moisture sensors” as an option in the city code &amp; City Council could require them LDRs</td>
</tr>
<tr>
<td>other water conservation measures in new construction &amp; landscaping</td>
<td>pending TBW Study</td>
<td></td>
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<td></td>
<td>10/10/19 - Tampa Bay Water is looking at a conservation plan with a regional approach with some funding that could be available.</td>
</tr>
<tr>
<td>Creating an incentive program for homeowner hurricane mitigation</td>
<td>TBD</td>
<td>3/14/2019</td>
<td>7/12/2018</td>
<td>Gabbard</td>
<td>Noah Taylor</td>
<td>3/14/19 – Staff to return with more information on what changes would be considered for seawalls based on engineering’s data analysis.</td>
</tr>
<tr>
<td>1 efforts in repetitive loss neighborhoods</td>
<td></td>
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<td></td>
<td>10/10/19 - CM Gabbard requested that this item remain on the list and will follow up with Noah Taylor as to where we are and will report back to the chair.</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Date</td>
<td>Date</td>
<td>Committee</td>
<td>Notes</td>
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<tr>
<td>---</td>
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</tr>
<tr>
<td>7</td>
<td>Requiring 240 volt EV pre-wire in all new single family home construction &amp; a possible exemption for affordable housing</td>
<td>TBD</td>
<td>9/6/2018</td>
<td>Gabbard, Abernethy, Wright</td>
<td>10/10/19 - CM Gabbard will meet with staff to determine if Vision 2050 is a good fit for this item. Sharon Wright stated that this item is part of the Bloomberg American City Climate Challenge. Gabbard will gather information and report back to Chair Rice once the best fit is determined for this item.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Mobile home building codes in coastal high hazard areas</td>
<td>12/12/2019</td>
<td>2/7/2018</td>
<td>Gabbard, Taylor, Tyre</td>
<td>9/12/19 – CM Gabbard requested update from Mr. Taylor &amp; Tyre.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Discuss current herbicide/pesticide use &amp; the potential adoption of restrictions on those containing harmful chemicals</td>
<td>TBD</td>
<td>5/2/2019</td>
<td>Driscoll, Jefferies, Booth</td>
<td>10/10/19 - Driscoll, the County formed a taskforce for this specific issue and City staff members including Mike Jefferies are participating. She asked for more time while this taskforce meets to see where we are. Driscoll will report back with their findings.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Potential ordinance to establish a user-fee for single-use plastic bags</td>
<td>TBD</td>
<td>11/15/2018</td>
<td>HERS Committee, Wright</td>
<td>10/10/19 - Sharon Wright would like to bring this back for discussion in 2020 once the current plastic/straw ban is in full enforcement</td>
<td></td>
</tr>
</tbody>
</table>

**HERS 2019 Dates:** 1/24, 2/14, 3/14, 4/11, 5/9, 7/11, 8/23, 9/12, 10/10, 11/14, 12/12 – **2020:** 1/16, 1/30  

* Tentative