

Water Resources Council (WRC)

January 13, 2021



North Central Texas Council of Governments
Environment
& Development

www.nctcog.org/WaterResources

Procedures for Online Meeting

- ▶ Today's presentation is posted on the WRC website at: <https://www.nctcog.org/envir/committees/water-resources-council>
- ▶ Roll call today in lieu of sign-in sheet.
- ▶ Please state your name and entity you are representing when you ask a question or provide a comment.
- ▶ Please keep your microphone on mute when not speaking.
- ▶ Approval of action items will still be done by a voice vote. Please only vote if you are a member of the WRC.

Action Item

2. Meeting Summary

The [October 15, 2020 meeting summary](#) will be presented for approval.

Presentation

3. Department of Energy's Sustainable Wastewater Infrastructure of the Future Initiative (SWIFt).

Shannon Zaret, Energy Technology Program Specialist

Weatherization and Intergovernmental Programs Office

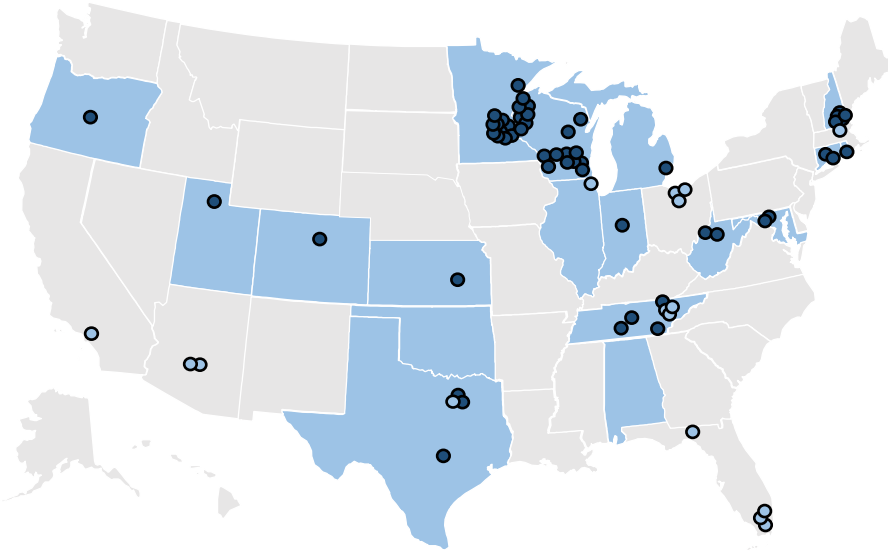
Office of Energy Efficiency and Renewable Energy

U.S. Department of Energy



Sustainable Wastewater Infrastructure of the Future Initiative

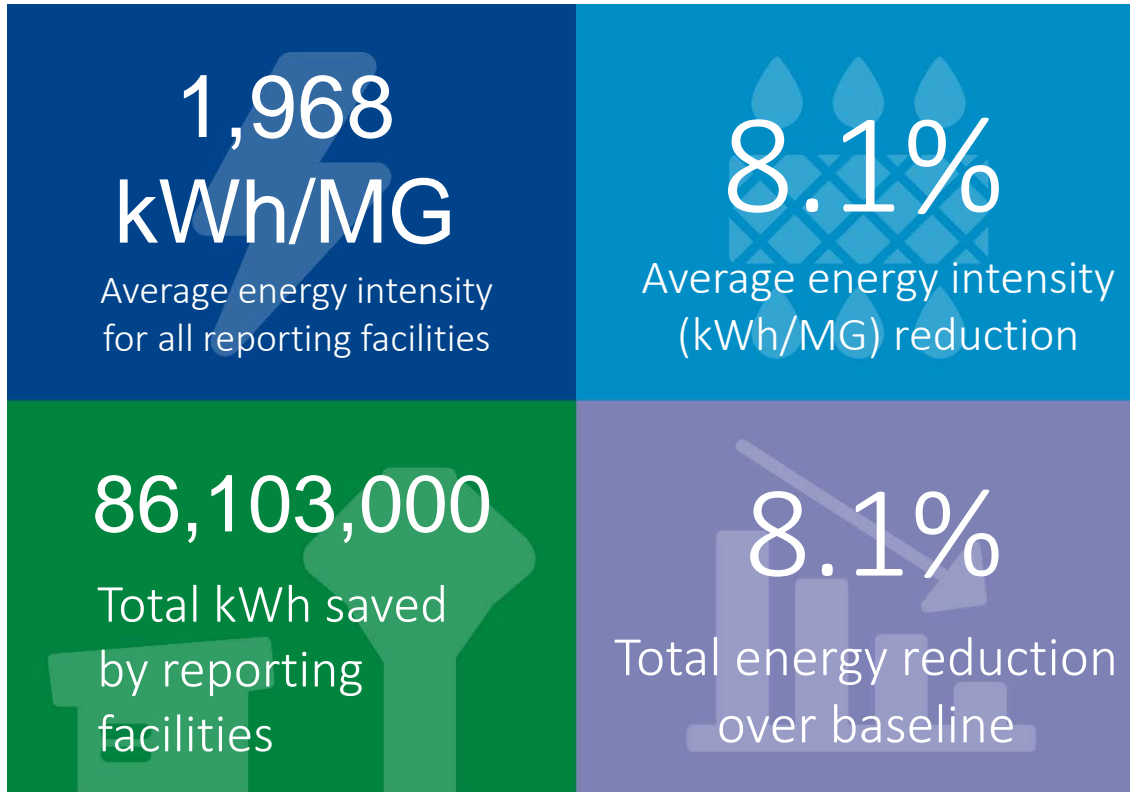
SWIFt Phase 1



- **4 billion gallons of wastewater** – treated daily by SWIFt Facility Partners (~12% of wastewater treated by publicly owned wastewater treatment facilities)
- **25 million people** – served by SWIFt Facility Partners (8% of nation's population)

- SWIFt 1.0 was a three-year partnership (2016-2019) that engaged 70 wastewater treatment facilities to accelerate the adoption of innovative and best-practice approaches in data management, technologies, and financing for infrastructure improvement.
- SWIFt Partners sought to improve the energy efficiency of their participating wastewater treatment facilities by at **least 30%** and integrate at least one resource recovery measure.

SWIFt 1.0 Results



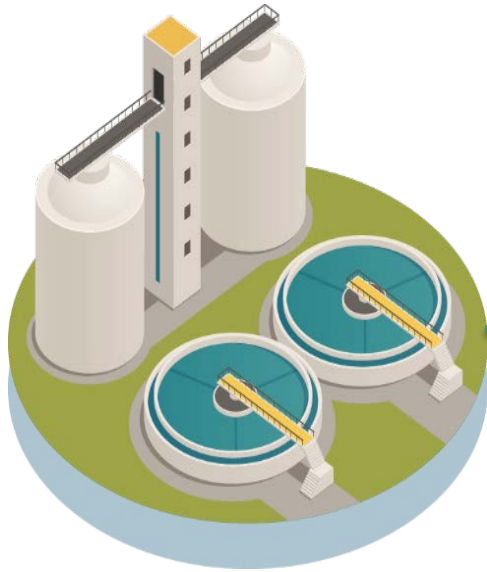
Based on SWIFt partner data through 2018

Wastewater Energy Management Toolkit



- The **Wastewater Energy Management Toolkit** is a collection of resources that will enable water resource recovery facilities to learn and benefit from SWIFT's work.
- Toolkit resources support best practices and innovative approaches successfully used by wastewater facilities to establish and implement energy management and planning

Wastewater Energy Management Toolkit



Data Management

The **Energy Data Management Manual** provides clear, step-by-step guidance to track energy performance and compares publicly available energy data management tools.

Measure Planning

The **Measures Checklist** includes no-and low-cost energy savings options and identifies 23 high impact innovative energy conservation and resource recovery measures.

The **Measure Planning Workbook** is an automated tool that can help facilities decide whether and how to implement one of the 23 measures.

Project Financing

The **Financing Matrix** highlights available financing and funding programs and mechanisms for the wastewater sector.

The **Energy Savings Performance Contracting Guide** helps decision makers consider this option for wastewater infrastructure improvements.

Plan Development

The **Infrastructure Improvement Plan Template** outlines topics a facility may consider including in their own plan. Several example plans are also available.

Energy Data Management Manual: Step-by-Step Approach



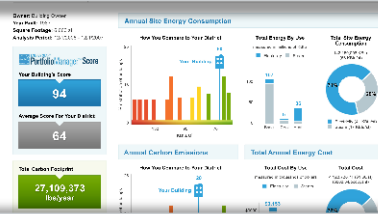
Energy Data Management Manual: Data Management Tools

Energy Assessment Tool (EAT)



EAT is an Excel-based tool that small- to medium-sized systems can use to conduct a utility bill and equipment analysis to assess individual baseline energy use and costs.

ENERGY STAR Portfolio Manager



EPA's ENERGY STAR Portfolio Manager is a no-cost, online interactive energy management tool that allows facilities to securely track and assess energy and water consumption.

Energy Performance Indicator Tool (EnPI)



The EnPI is a regression analysis tool developed by the U.S. Department of Energy to help managers normalize baseline of energy consumption.

Low and No-Cost Measures List

- A comprehensive checklist of low- and no-cost energy conservation measures recommended by U.S. DOE Industrial Assessment Centers
- Cost-effective, quick impact measures to achieve short-term savings goals (measures show 5-7% energy savings and average ≤ 2 year payback)

Low- and No-Cost Measures List

Installation

- Install timers on light switches and occupancy sensors in little-used areas and adjust for scheduled operations as needed.
- Install programmable thermostats and use night set-back/setup settings.
- Turn off unnecessary lighting and install occupancy sensors.
- Identify and use energy-efficient belts compatible with your facility's equipment.
- Change aeration blower intake filters regularly to minimize air intake resistance.¹
- Use automatic controls when available to optimize equipment, process monitoring, and operations.

Assessment

- Review and assess ventilation requirements to optimize efficiency, reduce space conditioning during non-working hours, and manage space conditioning energy use during non-occupancy times.
- Assess the potential to remove organics prior to entering the secondary treatment system. Assess the capability for high strength organic dischargers to feed directly to an anaerobic digester.
- Review operations to identify any pumps or blowers that are being throttled and assess them to determine if they can be adjusted to operate more efficiently.
- Assess air and water piping systems in need of insulation (exposed piping).
- Identify equipment speeds and resheave blowers where needed.
- Consult your energy utility account manager to evaluate rate schedules and determine the most efficient rate for your facility.

Operation

- Test, calibrate, and maintain dissolved oxygen level/sensors in aeration tank(s).²
- Shift to smaller HP pumps/blowers during nightly low-flow periods or seasonal low-flow periods, if applicable.³
- Reduce blower pressure to the minimum required through proper maintenance of aeration diffusers and distribution system to minimize head loss. Control the set point in the aeration blower control strategy. Also, identify, assess and repair aeration system air main leaks - (replace gasket, repair corrosion, underground maintenance) and lower aeration tank levels to reduce air header static pressure, if applicable. (May need sensing O₂ level).
- Turn off equipment when not in use (e.g., turn off aerobic digester blower periodically or operate intermittently).
- Adjust system operations when there is a change in wastewater load.
- Raise wet well levels to reduce static head in the pump system. Coordinate all control points (low-level alarm, pump start/stop, high-level alarm) to adjust the wet well level upward. Consider hydraulic profile of the facility when doing so.
- Eliminate leaks in inert gas and compressed air lines/valves.
- Operate select aeration tanks as needed while also establishing operating protocols to enable the plant to bring tanks back on line efficiently.
- Routinely clean UV lamp sleeves to enhance transfer efficiency and decrease the number of UV lamps where/when possible while still meeting disinfection needs.
- Idle aeration basins/zones, if not needed (periodic maintenance may still be needed).
- Reschedule plant operations or reduce load to avoid on-peak hours (e.g., operate dewatering equipment during off-peak, load digesters during off-peak, repair equipment, and shift recycling of supernatant to off-peak).

High Impact Measures List with Median Energy Savings

Technologies

- Blower Technologies + Optimization
- Dissolved Oxygen (DO) Control
- Emerging Diffuser Technologies
- Membrane Bioreactors (MBR)
- Pumping System Technologies + Optimization
- Pure Oxygen (Pure Ox) Systems
- Solar Photovoltaic (PV)
- Ultraviolet (UV) Disinfection Systems

Process Improvements

- Ammonia-based Aeration Control (ABAC)
- Blower Optimization (w/ Technologies)
- Chemically-Enhanced Primary Treatment (CEPT)
- Dissolved Oxygen (DO) Control (w/ Technologies)
- Modifying System Operations Seasonally
- Pumping System Optimization (w/ Technologies)

Management Approaches

- Energy Assessment
- Energy Conservation Programs
- Energy Management Systems
- Infiltration/Inflow (I/I) Studies
- Rate Structure Management
- Real-time Monitoring & Control

Resource Recovery

- Anaerobic Digestion
- Biosolids Energy Recovery
- Combined Heat & Power (CHP)
- Heat Recovery
- Inline Hydropower
- Onsite Water Reuse

Measure Planning Workbook

- Once the user has completed the applicable number of **Evaluation Matrix** sheets, the **Dashboard** sheet will display:
 - Names
 - Weighted scores and
 - Total scores of each proposal evaluation (uploaded automatically)
- User is able to view a side-by-side comparison of each proposal based on its criteria performance.

¹ABAC: Ammonia-Based Aeration Control

²CEPT: Chemically-Enhanced Primary Treatment

Evaluation Matrix:		1	2
Name:		ABAC ¹	CEPT ²
Total Score:		69	47
What is the potential environmental/permit impact?	13%	0.4	0.4
What will be the payback period?	13%	0.4	0.3
What level of effort is needed to operate and leverage an ammonia-based aeration control system? [^]	13%	0.3	0.1
What facility-wide energy savings are expected?	13%	0.3	0.4
What level of system will be installed?	13%	0.5	0.1
What is the purchase price of ammonia-based aeration control system equipment?	13%	0.3	0.3
What staff training is needed to operate and leverage an ammonia-based aeration control system?	13%	0.4	0.3
What are ongoing operations and maintenance needs for an ammonia-based aeration control system?	13%	0.4	0.1

Project Financing and Funding Comparison Matrix

The Project Financing Comparison Matrix is a quick, two-page reference document on nationally available funding and financing sources for the wastewater sector. The matrix enables facilities to compare financing options using a common set of evaluation criteria and select a method suited to their projects.

Financing Details (size, terms, interest, etc.)	Eligible Recipients	Eligible Activities	Application/ Execution Timeline	Application Requirements	Technical Assistance Available
Clean Water State Revolving Fund (CWSRF) https://www.epa.gov/cwsrf	Loan Size: Project requirements determined by individual states Loan Term (length): 30 years or the useful life of the project Interest rate/Fees: Vary by loan and state (national weighted average interest rate in 2018 was 1.510%) Grants: States may use up to 30% of their CWSRF funding to provide grants (in the form of principal forgiveness, negative interest rate loans, or grants)	Municipalities, tribes, or inter-municipal, interstate, and state agencies; non-profit organizations and National Estuary Programs	Energy efficiency is one of the 11 eligible project types	Apply through state programs; states may accept applications on a rolling basis or according to an annual cycle	The project must be on the state's priority list to be eligible to receive assistance; Federal requirements and cross-cutter provisions apply

Project Financing and Funding Comparison Matrix

- Also provides a set of tools to help identify potential financing or funding sources for your project.
 - DOE's Better Buildings Financing Navigator
 - EPA's Water Finance Clearinghouse
 - Database of State Incentives for Renewables & Efficiency

DOE's Better Buildings Financing Navigator

<https://betterbuildingsinitiative.energy.gov/financing-navigator>



Online tool helps public and private sector organizations identify the most appropriate financing solutions for their energy efficiency and renewable energy projects

EPA's Water Finance Clearinghouse

<https://www.epa.gov/waterfinancecenter/water-finance-clearinghouse>



Online portal designed to help communities locate potential funding sources. The portal consists of a searchable database of funding sources from federal, state, utility, nonprofit, and other public and private organizations. The portal enables users to apply several filter categories and search criteria to find the most relevant opportunities.

Database of State Incentives for Renewables & Efficiency (DSIRE)

<http://www.dsireusa.org/>

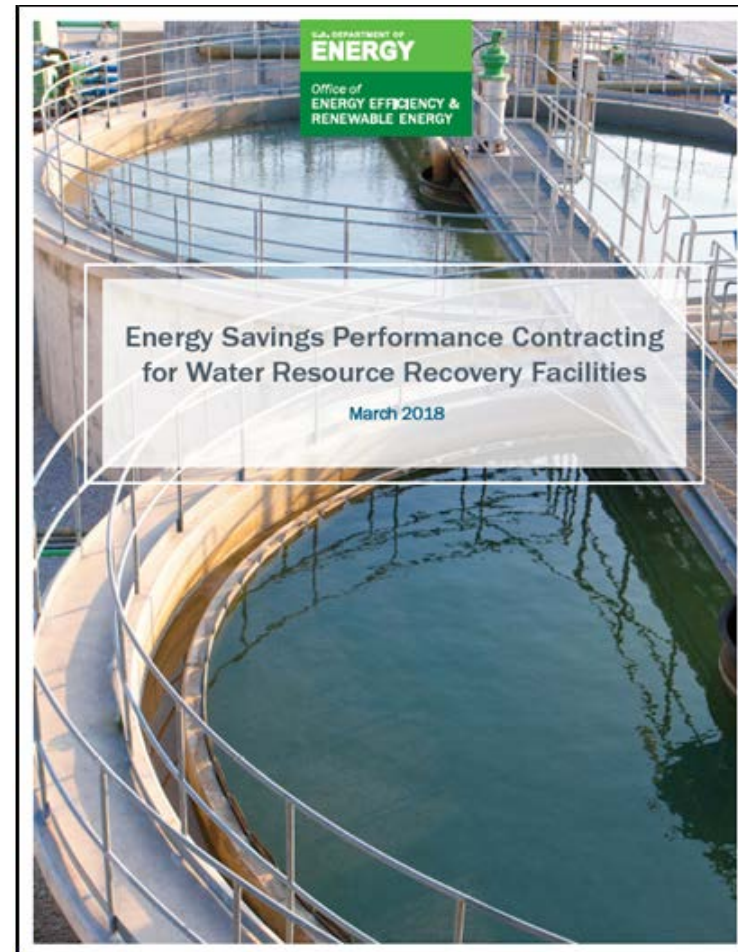


A searchable database of information on incentives and policies that support renewable energy and energy efficiency in the United States. Wastewater facilities can use this tool to identify financial incentives such as tax credits, rebates, bonds, loan guarantees, loans, and grants.

Energy Savings Performance Contracting (ESPC) as means for financing infrastructure upgrades

Energy Savings Performance Contracting in Water Resource Recovery Facilities:

- Information
- Resources
- Successful project profiles



SWIFt Partner Infrastructure Improvement Plans

USDOE SWIFt Accelerator
Miami-Dade Water & Sewer IIP

Low- and No-Cost

The Low- and No-Cost Measures List as part of the SWIFt workbooks includes many other opportunities at MDWASD Wastewater Treatment Plants. Any of these measures not already detailed in previous sections are listed:

Installation

- Timers and occupancy sensors for lights
- Programmable thermostats
- Energy-efficient belts

Assessment

- Optimize ventilation based on requirements
- Evaluate electric utility rate structure

Operation

- Optimize pump/blower HP sizing
- Turn off equipment when not in use
- Adjust system operations when there is a change in wastewater load
- Eliminate leaks in inert gas and compressed air lines/valves

It is estimated that Low- No-Cost measures can save MDWASD approximately 1% off total energy consumption: Savings are calculated as:

$$= 202,689,040 \frac{\text{kWh}}{\text{yr}} \times 0.01 \text{ energy efficiency gain}$$

$$= 2,026,890 \frac{\text{kWh}}{\text{yr}}$$

Associated cost savings are calculated as:

$$= 2,026,890 \frac{\text{kWh}}{\text{yr}} \times 0.06 \frac{\$}{\text{kWh}}$$

$$= 121,613 \frac{\$}{\text{yr}}$$

USDOE SWIFt Accelerator
Miami-Dade Water & Sewer IIP

MDWASD BASELINE RECORDING AND CONSUMPTION TRACKING

Facility Name:	MDWASD		
Facility State:	FL		
Current Reporting Years:	2017-2018		
Base Year:	2016		
Primary Energy Consumed (kWh):	Baseline Year	2017	2018
Electricity	137,886,800	131,904,356	129,338,079
Natural gas	22,765,387	9,830,217	4,385,464
Distillate or Light Fuel Oil (#1, 2, & 4)	8,228,634	29,308,741	25,177,753
Residual or Heavy Fuel Oil (# 5, 6, Navy Special & Bunker C)			
Coal			
Coke			
Blast Furnace Gas			
Wood Waste			
Biogas	33,807,916	25,718,786	26,108,986
Other Liquid (please specify)			
Other Solid (please specify)			
Flow	303	312	288
Total Primary Energy Consumed, (kWh):	202,689,040	196,762,100	185,010,570
Weather/Production/Other Normalizing related Adjustment for Baseline Primary Energy, (+/- kWh):			
Adjusted Baseline of Primary Energy (kWh):	202,689,040		
Total Energy Savings since Baseline Year (kWh) (intensity):		11,679,830	7,911,935
Total Energy Savings since Baseline Year (%) (intensity):		5.60%	4.10%
Total Energy Cost Savings since Baseline Year (\$) (intensity):		\$ 700,790	\$ 474,716

Better Buildings Solution Center



More than 2,500 solutions are available publicly in the Better Buildings Solution Center

Showcase Projects:

- Large and small buildings
- All sectors
- Specific building types such as schools, hospitals, hotels, grocery stores, universities, civic centers, libraries, offices and labs

Implementation Models (Playbooks):

- Overcome barriers: finance, data, energy management, staff training, community and customer outreach, partnering with utilities, and more
- Multi-faceted and applicable across sectors

Additional Resources, Toolkits, Case Studies

Next Steps - SWIFt 2.0

- SWIFt 1.0 partners achieved robust results using DOE-developed energy management decision-making tools and how-to resources. SWIFt 2.0 will continue this momentum by helping facilities beyond the Accelerator leverage these proven energy management tools and resources.

Goals

- Phase 2 (SWIFt 2.0) will engage 100 facilities in a voluntarily partnership to achieve 5% short-term and 25% long-term facility-wide energy savings, and will also work with 25 facilities to implement at least one next-generation technology (e.g., renewable energy, resource recovery, and advanced data management).

SWIFt 2.0 - Track Breakdown

SWIFt Toolkit Training

- For facilities interested in prioritizing energy savings and introducing the building blocks of energy management into their operations
- Designed to provide a deep dive into the resources that support best practices and innovative approaches successfully used by wastewater facilities to establish and implement energy management and planning
- Partner facilities voluntarily commit to achieving 5% short-term, 25% long-term cumulative energy savings

SWIFt Energy Recovery Accelerator (SWIFter)

- Facilities that are ready to adopt more advanced energy technologies can join the SWIFt Energy Recovery (SWIFter) Accelerator
- Designed to provide customized technical assistance on energy and related data management, energy efficiency improvements, advanced technology integration, and project financing
- Partner facilities voluntarily commit to issuing a Request for Proposals to implement at least one next generation infrastructure improvement project

SWIFt Toolkit Training



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SWIFt Energy Recovery Accelerator (SWIFter)

SWIFter partner facilities will choose and focus on one of four advanced technology tracks. Partners have the option of observing the other track sessions, but any customization will be reserved for their chosen track.



Energy Capture

Resiliency, onsite generation, and renewable energy integration (e.g., combined heat and power, solar photovoltaic, biogas, heat recovery, and energy storage)



Energy Efficiency

Advanced energy efficiency technologies (e.g., ammonia based aeration control, optimized pumping system technologies, and membrane bioreactors)



Resource Recovery

Biosolids recovery for land application as fertilizer and water recovery



Advanced Data Management

Advanced data management, sensing and control for optimized energy performance (e.g., Supervisory Control and Data Acquisition (SCADA) systems and Artificial Intelligence (AI) techniques)

Energy Data Analysis and Energy Data Management Planning

First crack at the new wastewater tailored 50001 Ready Navigator, which allows facilities to create a comprehensive energy management roadmap. This tool pairs with DOE's Energy Performance Indicator Tool which can be used to calculate corporate level improvements and savings, determine CO₂ avoided emissions data, forecast and back cast data, and perform regression analysis.

50001 Ready Navigator

LANGUAGE: English | Log In | Contact | FAQs | Explore

+ Create New Project | Navigate Project | Project Dashboard | Select a Section | Get Ready Recognized

Dashboard

OVERALL PROGRESS: 0% Completed

0% | 0% | 0% | 0% | 0% | 0% | 0%

CONTEXT OF THE ORGANIZATION | LEADERSHIP | PLANNING | SUPPORT | OPERATION | PERFORMANCE EVALUATION | IMPROVEMENT

Task Assignments

Context of the Organization | Leadership | Planning | Support | Operation | Performance Evaluation | Improvement

Task	Assigned To	Approver	Status	Status Date
1 An EnMS and Your Organization	not assigned	Log in to track progress		
2 People and Legal Requirements Affecting the EnMS	not assigned	Log in to track progress		
3 Scope and Boundaries	not assigned	Log in to track progress		

Corporate Roll-up

	FY1	FY2	FY3	FY4
Hastings				
Purchased electricity(MMBTU)	4,073	4,306	4,334	4,033
LPG(MMBTU)	7,213	6,963	6,677	6,714
TOTAL Primary Energy Consumed (MMBtu/year)	11,286	11,269	11,012	10,748
TOTAL MODELED Primary Energy Consumed (MMBtu/year)	11,286	11,269	11,012	10,748
Annual Improvement (%)	0.0%	3.6%	2.0%	2.5%
Total Improvement (%)	0.0%	3.6%	5.6%	8.1%
New Energy Savings for Current Year (MMBtu/year)	0	17	258	264
Total Energy Savings since Baseline Year (MMBtu/year)	0	17	275	539
McLean				
Electricity (MMBTU)	302,219	252,204	274,129	267,194
Natural Gas (MMBTU)	136,359	113,943	130,994	132,601
TOTAL Primary Energy Consumed (MMBtu/year)	438,578	366,147	405,123	399,795
TOTAL MODELED Primary Energy Consumed (MMBtu/year)	438,578	420,488	440,605	408,602
Annual Improvement (%)	0.0%	12.9%	-4.9%	-5.9%
Total Improvement (%)	0.0%	12.9%	8.1%	2.2%
New Energy Savings for Current Year (MMBtu/year)	0	54,341	-18,859	-26,675
Total Energy Savings since Baseline Year (MMBtu/year)	0	54,341	35,482	8,807
Reston				
Electricity (MMBTU)	1,797,595	1,574,253	1,120,188	1,254,039
Natural gas (MMBTU)	968,488	938,708	677,467	743,413
TOTAL Primary Energy Consumed (MMBtu/year)	2,766,083	2,512,960	1,797,655	1,997,452
TOTAL MODELED Primary Energy Consumed (MMBtu/year)	2,499,635	2,327,169	1,797,655	1,996,835
Annual Improvement (%)	0.0%	2.2%	7.4%	0.0%
Total Improvement (%)	0.0%	2.2%	9.6%	9.6%
New Energy Savings for Current Year (MMBtu/year)	0	80,657	185,791	-267,065

Scenario Modeling with DOE's MEASUR Suite

The screenshot displays the MEASUR web application interface. At the top left is the U.S. Department of Energy logo and the text "Energy Efficiency & Renewable Energy". The main header features the "MEASUR" logo. Below the header, a welcome message reads: "Welcome to the most efficient way to manage and optimize your plant's systems and equipment. Create an assessment to model your system and find opportunities for efficiency or run calculations from one of our many property and equipment calculators. Get started with one of the following options." Two curved arrows point to two main sections: "Create Assessment" and "Properties & Equipment Calculators".

The "Create Assessment" section includes:

- Create Pump Assessment**: Formerly DOE Pumping System Assessment Tool (PSAT)
- Create Process Heating Assessment**: Formerly DOE Process Heating Assessment and Survey Tool (PHASST)
- Create Fan Assessment**: Formerly DOE Fan System Assessment Tool (FSAT)
- Create Steam Assessment**: Formerly DOE Steam System Analyzer Tool (SSAT)

The "Properties & Equipment Calculators" section includes:

- Motors
- Pumps
- Fans
- Process Heating
- Steam
- Compressed Air
- Lighting
- General

A sidebar on the left contains navigation links: Home, All Assessments, Examples (Basic Pump Example, Fan Example, Refractal Furnace Globe Study, 3 Header Example), ESA Examples (Facility A, Pump 1A, Pump 1b, Pump 1C), All Calculators (Motors, Pumps, Fans, Process Heating, Steam, Compressed Air, Lighting, General), Settings, Custom Materials, Tutorials, About, Feedback, Acknowledgments, and v0.4.0-beta.

The footer of the interface includes the U.S. Department of Energy logo and the text "Energy Efficiency & Renewable Energy".

MEASUR is designed to help facilities measure the impact of proposed infrastructure upgrades.



TIME LINE

The SWIFter Accelerator is designed to be flexible to accommodate participants' scheduling needs and includes individual scoping meetings, tailored workshops, training on energy savings resources and data analysis tools, one-on-one consultations, and peer-to-peer exchanges. SWIFter will facilitate streamlined scheduling and communications throughout the Accelerator.

Initial Partner Conversations



FALL
2020

Once partner facilities sign the SWIFter Partnership Agreement, DOE will conduct an initial phone conversation to discuss the facilities' current progress on efficiency measures as well as advanced technology interest areas.

Track-Specific Peer-Exchanges



WINTER
2020-2021

After partner facilities have chosen their technology track of interest, DOE will schedule track specific peer exchange sessions to discuss technical assistance requests. DOE's network of national laboratories will design and develop tailored technical assistance workshops based on the feedback received during these sessions.

Introductory and Technical Workshop Sessions



SPRING
2021

All partner facilities will receive a 2-hour introductory training on DOE energy management resources (e.g., SWIFt Toolkit, 50001 Ready Navigator, and Better Plants). These resources will help facilities meet their short-and long-term voluntary energy savings goals. Following this, facilities will break into their chosen technology tracks and attend customized technical assistance workshops.

Baseline Data Collection and Annual Reporting



SPRING
2021 - 2022

DOE will work with partner facilities to collect suggested data points related to the facilities' energy use in order to get a baseline metric for the energy savings achieved throughout the program. The baseline data will be collected within six months from the date of signing the partnership agreement. These same data points will be collected annually for three years. Data submission is voluntary. All data and information will be kept confidential and shared only in the aggregate.

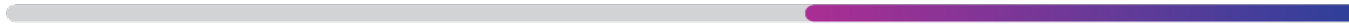
Financial Planning Workshops



SPRING
2022 - 2023

Partner facilities will attend financial planning workshops customized to their needs. Topics will include financial planning resources and RFP drafting tips. Facilities will also have the opportunity for peer exchanges with facilities who have successfully funded infrastructure upgrades.

Customized Technical Assistance



SUMMER
2022-2023

Each partner facility will receive an additional ten hours of customized technical assistance on their chosen topic.

Issuing RFPs and Information Sharing



SUMMER
2023

Within 12-18 months following the conclusion of the program, facilities will put plans in place to achieve long term energy savings and issue RFPs to implement one next generation measure. The SWIFt Team will also work with the facilities to draft partner case studies and share lessons learned so that other facilities can benefit from the SWIFter Accelerator.

Partnership Agreement – Voluntary Commitments

A SWIFt Toolkit Training Partner Agrees to:

- **Commit** to issuing a Request for Proposals (RFP) to initiate an infrastructure improvement that includes one next-generation advanced technology
- **Adopt** a facility-wide goal to reduce energy intensity by 25% over a 10-year period
- **Participate** in peer exchange and technical assistance forums about tools, approaches, technologies, and options
- **Establish** an energy use and energy intensity baseline
- **Report** energy intensity, energy use data, and achievements annually to DOE for three years following the initial training
- **Develop** an infrastructure improvement plan that includes best-practice energy performance tracking, a package of cutting-edge technologies, and a concrete financing model within 12-18 months following the conclusion of the training program
- **Demonstrate** at least a 5% cumulative energy consumption, as measured by overall energy intensity, by applying the SWIFt Toolkit's low- or no-cost energy conservation measures within 3 years
- **Share** results and lessons learned with DOE and other SWIFt Initiative partners

The Department of Energy Agrees to:



- **Appoint** a point of contact
- **Provide technical assistance** and training on energy data management, energy savings measures, project financing, and project implementation plan development
- **Develop** additional technical tools and/or assistance necessary to meet the goals of the SWIFt Initiative
- **Create and facilitate** networking and technical peer exchange opportunities with stakeholder organizations and other partners to develop best practices and share innovative solutions
- **Leverage** full set of tools and resources developed by stakeholder organizations and compile best practices and approaches for striving toward sustainable infrastructure
- **Provide national recognition** to SWIFt Initiative partners and participating facilities for achieving milestones and for their leadership in working toward a sustainable wastewater infrastructure

Advanced Manufacturing Office, Better Plants Program

- **SWIFT** partners will also have the opportunity to continue their progress through the **Better Plants program**
- **Better Plants** is a **voluntary**, public-private partnership program for **manufacturers** and industrial organizations
- Through Better Plants Partners:
 - Set **long-term efficiency goals**
 - Receive **technical assistance, networking platforms** and **national recognitions**
 - Learn how to conduct assessments, use DOE tools, and implement projects through **in-plant trainings**
- Partners are assigned **Technical Account Managers** to help them **achieve their energy performance goal**
 - Help **establish or improve data collection and analysis methods**; assist in annual reporting
 - Provide **assistance on AMO's** suite of industrial system software platforms
 - Relay information regarding **program developments, upcoming events, new resources, and other announcements**
 - Connect partners to one another for **peer-to-peer learning**
 - Help with energy baselines and data tracking/reporting (e.g., EnPI tool)

<https://betterbuildingsinitiative.energy.gov/better-plants>

A document titled "Better Plants Partnership Agreement Form". It includes the Better Buildings logo and the text "Partnership Agreement Form". The form contains several sections: "The Better Buildings Better Plants Program is a voluntary initiative to significantly improve energy efficiency across U.S. building manufacturing in the program and to reduce the energy intensity of the manufacturing sector for plants and partners. This program will help these industrial and manufacturing organizations and others improve energy performance, save the money, and create new jobs." "Better Plants Partners agree to:" followed by a bulleted list of commitments. "DOE agrees to provide:" followed by a bulleted list of services. "Agreement:" followed by a statement of commitment and a signature line. At the bottom, there are fields for "Name", "Title", "Company", and "Address". The "ENERGY" logo is in the bottom right corner.

Frequently Asked Questions

What is the time commitment involved?

The SWIFter Accelerator covers a three-year time period. The sessions will be spaced out through-out the year, coordinated with the facilities schedules, and no more than two hours on average. The individual technical assistance can be scheduled with the technical account manager at the facilities' discretion.

What if I am already involved in a state-run program or working with a consultant?

Our program is meant to be additive and create synergies between programs. Many consultants work with our tools and would have the opportunity to get a first crack at the new tailored resources. It also provides a good opportunity to have another eye review the facilities' 10-year plan and allows facilities to network with other facilities who have successfully implemented projects across the U.S.

Frequently Asked Questions

Will you cover regulatory barriers to implementation?

Yes, this is a common theme among our stakeholders and raises a key feature of our program. SWIFter is meant to be responsive to the facility. If there is an issue that you want our team to address, we will cover it. We will also take stock of the program regularly to ensure the facilities are satisfied with the program content.

What do you do with our data?

Sharing energy-savings data with DOE is encouraged but optional. DOE keeps facility and utility data confidential. Data are only used in the aggregate to assess the efficacy of the initiative or highlight partner success stories. It is up to the facility if they would like to receive national recognition.

Can our operators receive continuing education credit?

If you are interested in CE credit, we will submit our workshops to the state so that your operators can receive credit for attending our technical workshops.

Q & A

Discussion

4. Development of the 2021 WQMP

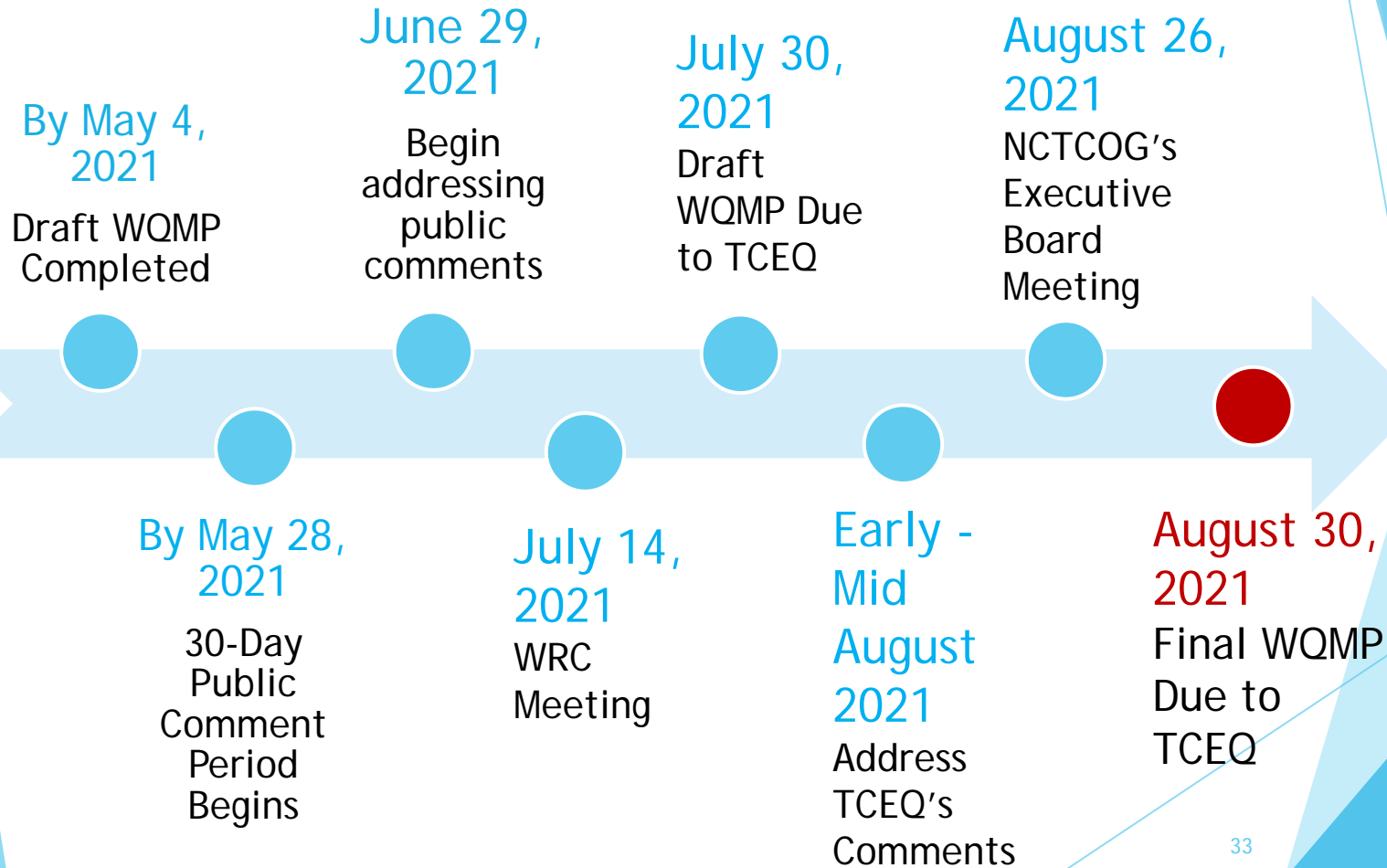
- New data to be added:
 - Preliminary map of locations of on-site sewage facilities in the region

- Data to be updated:
 - Population estimates for NCTCOG region
 - Impaired water bodies
 - Use data from *2020 Texas Integrated Report*
 - Wastewater service area boundaries
 - Sanitary Sewer Overflow data
 - *2016 Region C Water Plan Citations*

- Comments/questions?

Discussion

4. Development of the 2021 WQMP - Timeline



Discussion

5. 2021 Water Resources Education and Outreach

The WRC is asked for input on webinar topics and/or speakers.

Discussion

6. 87th Legislative Session.

NCTCOG will be tracking water-related bills. The WRC is invited to share any pertinent water resource issues, topics, news, or bills of interest to date.

Other Business and Roundtable Discussion

7. NCTCOG Updates

- a. WQMP Subcommittee Meeting on November 17, 2020.
- b. Trash Free Texas Webinar, “Connecting Volunteers with Litter Cleanup Locations.” Tuesday, January 19, 2021 at 1:30 p.m. [Add to Calendar](#)

Other Business and Roundtable Discussion

7. NCTCOG Updates

- c. North Central Texas Watershed Stakeholders Meeting. Wednesday, March 24, 2021 at 9:30 a.m.

[Add to Calendar](#)

- d. North Central Texas Water and Wastewater Utility Energy Management Survey.
- e. Water for North Texas Resource Library.
- f. Annual Water Resources Questionnaire.

Other Business and Roundtable Discussion

7. NCTCOG Updates

- g. **U.S. EPA Anaerobic Digestion Grant.** NCTCOG hosted an online discussion called “Food Waste, Anaerobic Digestion, and Renewable Natural Gas Roundtable” on December 9, 2020. The recording of this meeting can be found [here](#).

Other Business and Roundtable Discussion

7. NCTCOG Updates

- h. Wastewater Treatment and Education Roundtable (WATER).
 - i. Holiday Grease Roundup. 33 cities participated.
 - ii. [FY2020 Work Program Summary](#)
 - iii. Next WATER meeting. Wednesday, March 10, 2021. [Add to Calendar](#)
 - iv. Upcoming Explainer Videos. “Why Your Sink Isn’t a Garbage Can” and Personal Care Items Are Not Flushable.”
 - v. WATER is still accepting commitments for FY2021 Work Program [here](#).

Other Business and Roundtable Discussion

7. NCTCOG Updates

- i. Celebrating Leadership in Development Excellence (CLIDE) Awards.



2021 CLIDE Celebrating Leadership In Development Excellence Awards

The CLIDE (Celebrating Leadership in Development Excellence) Awards honor development and planning projects that exemplify the region's Principles of Development Excellence, which outline a vision for sustainable, livable communities in North Texas. The North Central Texas Council of Governments (NCTCOG) is looking for projects and programs from North Texas that exemplify these principles.

Applications Accepted
February 1 - March 1, 2021
www.DevelopmentExcellence.com

Categories for Submittal

New Development

Recognizes developments that are constructed on previously undeveloped sites and that successfully exemplify many of the Principles of Development Excellence.

Redevelopment

Recognizes those developments that reuse and/or rebuild existing structures, and that successfully exemplify many of the Principles of Development Excellence.

Special Development

Recognizes projects that exemplify only one or two of the Principles of Development Excellence, but which are outstanding in their promotion of those selected principles. Projects that exemplify the Environmental Stewardship principle may be highlighted here. Examples include but are not limited to a sustainable infrastructure project, an energy conservation initiative, an open space or trail project, or a stormwater best management practice such as low-impact development.

Raising Public Awareness

Recognizes an organization and/or individual for educating the public or raising awareness of development excellence. Submittals may include but are not limited to: A media outlet in the North Central Texas region for a story or series, or an organization or a local government for a public education campaign.

Public Policy and Planning

Recognizes a local government or private/public partnership for implementing a program or policy that facilitates and promotes various aspects of the Principles of Development Excellence. Submittals may include but are not limited to: adopted policies, programs, ordinances, guidelines (mixed use, open space, natural feature protection, historic preservation, or incentives) that can include a public/private initiative; and comprehensive, neighborhood, area, or strategic plans.

Other Business and Roundtable Discussion

7. NCTCOG Updates

- j. **Five Star and Urban Waters Restoration Grant Program RFP.** The application deadline is January 28, 2021. More information can be found [here](#).
- k. **Save our Seas 2.0 Act**

Other Business and Roundtable Discussion

8. Future Agenda Items

The WRC can request future agenda items.

9. Roundtable

The WRC is invited to share what is happening in their communities.

Other Business and Roundtable Discussion

10. Schedule for the next meetings

The next WRC meetings are scheduled for:

- ▶ **Thursday, April 15, 2021** [Add to Calendar](#)

Via Microsoft Teams

- ▶ **Wednesday, July 14, 2021** [Add to Calendar](#)

Location TBD

- ▶ **Wednesday, October 13, 2021** [Add to Calendar](#)

Location TBD

11. Adjournment

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