

This memo provides a summary of how the COVID-19 pandemic has affected DNREC's and other US energy efficiency programs. The objective of this memo is to provide information on how DNREC can adapt existing and new programs to meet the new challenges brought on by the pandemic and provide economic stimulus to Delaware homes and businesses. Our team examined both primary (direct surveys and interviews) and secondary (published reports and other literature) data sources to provide DNREC with an overview of:

- 1. The status of programs in Delaware, including how, if at all, COVID-19 has impacted them;
- 2. How other jurisdictions are affected by, and adapting to COVID-19;
- 3. Findings and recommendations from COVID-related Policy White Papers;
- 4. EcoMetric's recommendations for DNREC's program teams.

# 1 2020 STATUS OF DNREC PROGRAMS

During EcoMetric's CY2019 evaluation of DNREC's energy efficiency and renewable energy programs, we interviewed a variety of program and market actors. During these interviews, we asked respondents how, if at all, COVID-19 had affected them with respect to energy consumption, attitudes about energy efficiency, their jobs, and the ways in which they implemented and/or interacted with DNREC's programs.

In this section, we summarize our COVID-related findings from these interviews.

# 1.1 RESIDENTIAL

# 1.1.1 WEATHERIZATION ASSISTANCE PROGRAM

The Weatherization Assistance Program (WAP) closed all operations at the end of March 2020 in response to the Governor's Stay at Home order. While the program closed all operations, program staff actively worked to develop new policies and procedures to ensure the program could serve its clients when the Stay at Home order was lifted. Due to the nature of the implementation of this program, it was important for the program to proactively inquire about the client's comfort level with auditors and contractors entering their homes as well as inform the clients about the type of personal protective equipment (PPE) that will be used during the installation.

Program staff implemented new policies and procedures for both client intake and the installation of weatherization services. As a result of implementing the new policies and procedures to ensure safe practices, 17 out of 18 clients agreed to have the weatherization services completed when contacted by Subgrantees to schedule services when program operations restarted on June 1<sup>st</sup>, 2020.

# Client Intake

Prior to the start of the COVID-19 pandemic in March 2020, client intake was primarily completed through face-to-face meetings in Subgrantee office locations as well as through LIHEAP registration. In response to the pandemic, client intake is now completed through a combination of virtual (phone calls and emails) and minimal contact drive-up locations. While the new procedures might require more time to complete client intake forms, the program has continued to see a steady flow of new clients requesting weatherization services.

# Auditing and Measure Installation

Program staff conducted online training sessions with auditors and contractors to inform them of the new procedures and use of PPE while in client's homes. In addition to providing PPE to auditors and contractors, WAP also provided PPE to clients to use while contractors weatherized their homes.

At the time of our interviews, WAP program staff expected these procedures to be in place for the foreseeable future. Furthermore, staff was continuing to look for ways to improve program processes (e.g. using e-signatures) to enable safe participant intake and safe installation of weatherization measures.

# 1.2 COMMERCIAL & INDUSTRIAL

# 1.2.1 ENERGY EFFICIENCY INVESTMENT FUND

Currently, the Energy Efficiency Investment Fund (EEIF) continues to operate, with DNREC's staff working remotely. As part of interviews conducted for the EEIF process evaluation, EcoMetric asked program staff, contractors, and participants how the COVID-19 pandemic affected the program, their business, and their projects, respectively.

# **Program Staff**

As of summer 2020, program staff reported that some participants delayed projects, but overall applications for comprehensive, multi-measure projects had actually increased due to the new custom grant incentive structure.

# Contractors

The evaluation team spoke with nine contractors who applied for EEIF grants on behalf of customers. All nine of these contractors reported that they continued to operate through the pandemic. However, six of the nine reported that business had slowed down; two of those said business had largely recovered but

four indicated that business continued to be slower than normal. Figure 1 displays contractors' characterizations of the pandemic's impacts on their business.

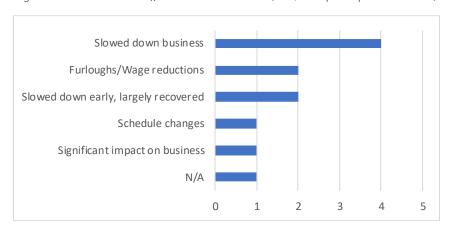


Figure 1. How COVID-19 Affected EEIF Contractors (n=9, multiple responses allowed)

One contractor reported significant impacts of COVID-19, saying it "wreaked havoc" on his business, with many projects being put on hold until at least 2021. Including this contractor, four respondents reported having to delay projects that were planned or in progress.

Most contractors said the pandemic had not changed the types of projects they worked on, but three reported adding "clean air technology" to their offerings, including UV disinfecting lights and titanium dioxide, filtration, and fresh air ventilation.

Finally, contractors expressed a need for faster turnaround of applications, especially during COVID-19, as these incentives are even more valuable to customers now.

# **Participants**

During evaluation interviews with six EEIF participants, we asked how the pandemic had affected their business. All six reported some impacts, ranging from minor – simply shifting to remote work with few other changes – to more significant effects such as shutting down completely for 3 months, laying off staff, and stopping work for all non-essential clients. One participant reported having to lay off two of their four employees – a first in their 20 years in business. This respondent said the federal PPP loan enabled them to rehire these employees, but workloads continued to wax and wane.

In terms of long-term effects, two participants predicted some changes would remain – one cited increased ventilation and air filtration, and one – in commercial real estate – predicted that office buildings would see "repurposing" of space, either into condominiums or another use, as some companies will continue remote work indefinitely.

Four of six participants planned to participate in EEIF again before the pandemic hit. Of these, one said the pandemic changed these plans since they are a nonprofit and will no longer have the funds to continue

with the project. The others indicated that COVID-19 would not affect their plans to implement additional energy efficiency upgrades.

Five of the six participants anticipated investing in energy efficiency projects within the next year. The other one wasn't sure if there was anything left to improve in their facility.

# 1.3 RENEWABLE ENERGY

# 1.3.1 GREEN ENERGY PROGRAM

As with EEIF, the Green Energy Program (GEP) has continued to operate through the pandemic, with contractors continuing to install renewable energy technology through the program. During our evaluation, we asked program participants how COVID had impacted their home energy usage and decision-making around energy efficiency. We found that GEP participants were evenly split between those experiencing an increase and those experiencing a decrease in energy consumption in their homes as result of the pandemic. Figure 2 shows the breakdown of how participants responded when asked how COVID impacted their home energy consumption.

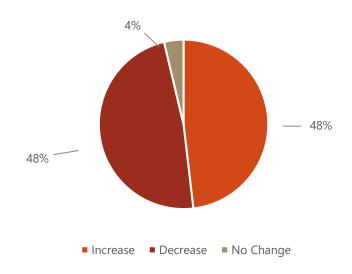


Figure 2: How, if at all, as the COVID-19 pandemic affected your home energy consumption? (n=27)

When asked whether COVID-19 had affected their decision-making around energy efficiency the majority of participants stated that COVID-19 had *not* affected their decision-making around energy efficiency. One respondent said, "It hasn't changed it; we are still trying to be energy conscious regardless of the situation."

"[COVID] hasn't changed [our decision-making around energy efficiency]; we are still trying to be energy conscious regardless of the situation." – GEP Participant Only 5 of 27 of respondents reported that COVID-19 *had* affected their decision-making, with most of these saying the pandemic had made them even more efficiency-conscious than before, and more grateful that they had installed renewable energy generation capacity in their homes. One participant said, "Actually, it has [affected our decision-making], because if we go to a permanent work from home solution, I've considered selling both of our cars and buying an electric car since I wouldn't have to leave the house really."

"It made me very happy that I got solar panels, my electric and gas bill has been very reasonable even with the increase of being home more, using more energy, cooking from home, I like how my bill looks." – GEP Participant

Approximately one quarter of participants reported plans to participate in other DNREC programs within the next 12-24 months<sup>1</sup>, citing electric vehicles, insulation, sustainable renewable energy credits, and solar PV as examples of programs they were interested in. All 27 surveyed participants said the COVID-19 pandemic would *not* affect these plans.

<sup>&</sup>lt;sup>1</sup> Survey conducted in July 2020.

# 2 OVERVIEW OF COVID-RELATED CHANGES TO OTHER PROGRAMS IN THE UNITED STATES

EcoMetric performed research into the ways other energy companies and utility jurisdictions across the United States are responding to COVID-19, including any associated economic hardships felt by homeowners and businesses. Our research focused on jurisdictions close to Delaware as well as those with well-developed energy efficiency programs across the country. Figure 3 highlights the states and entities from across the country where we conducted research.



Figure 3: States and Example Entities included in EcoMetric Research

# 2.1.1 RESIDENTIAL

# **COVID-Related Program Adjustments**

The last ten months have seen millions of people spending more time in their homes – whether due to job loss or remote working. The result has been increased residential energy consumption – some estimates put the increase at more than 20% - in homes, which means higher utility bills. The increase in cost, along with financial hardship due to job losses, has made it more difficult for many consumers to pay their bills. In response, virtually all program administrators are providing financial assistance to homeowners, with a focus on low-income households. Assistance includes direct financial relief as well as free resources and energy efficiency program changes. Examples include:

# Financial Relief

- Income Qualified:
  - Arrearage forgiveness
  - Hardship grants
  - Bill discounts

- Suspension of service disconnections
- Flexible payment plans

# **Program Adjustments**

- Virtual (contactless) home energy assessments
- Extended program application deadlines
- Allowing employees to take customer service calls from home

# **Program Suspension**

• In rare cases – such as in Maryland – jurisdictions have suspended some of their programs that involve close contact with customers in their homes. The suspensions are meant to be temporary and will hopefully be lifted once conditions and state mandates change.

Most entities have assembled free resources such as new energy-related guidance on their websites, given that people are spending much of their time inside their homes. The guidance is typically related to lighting and HVAC usage, but also includes education about how their homes use energy and how utility bills are calculated.

### 2.1.2 NONRESIDENTIAL

# **COVID-Related Program Adjustments**

As with residential customers, many program administrators are offering both financial relief and other options to nonresidential customers in response to COVID-19. Below is a list of pandemic-related actions utilities and other program administrators have implemented for:

# Financial Relief

- Suspension of service disconnections
- Loan deferral and flexible repayment options
- Increased grant limits
- Connecting small businesses to potential sources of state and federal funding/relief

# **Program Adjustments**

- Virtual pre- and post-installation inspections for less complex measures
- Automatic pre-approval of small projects
- Additional outreach/marketing
- Temporary increase in incentive amounts for upstream and point-of-sale programs
- Temporary increase in incentive amounts for small business direct install programs
- Free educational courses
- Free thermostat with audit
- Donations and contributions to charities and other non-profit organizations

- Extended application deadlines
- Providing resources for empty facilities as well as safe reopening of facilities
- Employees taking customer service calls from home

There is a clear emphasis on supporting midstream and upstream programs. These are programs in which distributors or retailers, respectively, are provided subsidies in order to sell products to end-users at discounted prices. Some utilities have temporarily increased the incentive amounts for such programs.

There is also clear emphasis on supporting small businesses. Small business has arguably been the commercial sub-sector most affected by the COVID-19 pandemic. Just as with low-income residential customers, many utilities are suspending service disconnections for small business customers and providing various forms of financial relief in an attempt to help them survive this tumultuous period. Many utilities are also offering increased incentives for their energy efficiency programs, including direct install programs that now pay up to 100% of project costs.

Examples of changes to offered to include:

- Massachusetts utilities have temporarily increased incentives for upstream, point-of-sale, small business, and direct install programs. Some direct install programs are paying up to 100% of project costs.
- A Maryland gas utility is temporarily offering a 15% increase in incentive levels for their business programs.

Virtually all service and program providers have posted information and resources for state and federal offerings, in an attempt to connect businesses with sources of financial relief.

# 2.1.3 NEW DEMAND FOR INDOOR AIR QUALITY EQUIPMENT AND METHODOLOGIES

As part of research for another client, EcoMetric heard directly from HVAC contractors in the spring of 2020. During in-depth interviews, these contractors said both residential and commercial customers were increasingly interested – and inquiring with contractors about – products and methodologies purporting to reduce the prevalence of COVID-19 and other pathogens in indoor air.

These indoor air quality (IAQ) products and methodologies can include<sup>2</sup>:

- Ultraviolet germicidal irradiation
- Pressurization
- Enhanced filtration
- Temperature and humidity control
- Increased outdoor air ventilation/change rates
- Bypassing heat recovery

Although some of these concepts have been well-studied with respect to implications for energy use, others are less well-understood (such as ultraviolet germicidal irradiation). However, even for the more common technologies and practices, such as filtration and ventilation/change ratios, the COVID pandemic has the potential to change the prevalence and intensity with which these products and methodologies are used. Most obviously, they appear likely to become more commonly installed, and to see increased hours of use<sup>3</sup>. Indeed, Mass Save addresses this directly on their website<sup>4</sup> and links to formal guidance issued by The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)<sup>5</sup> that includes increased mechanical ventilation (adjusting fan settings to run at all times, even if not currently heating or cooling); using air purifiers (or air

# MASS SAVE STATEMENT ON HEALTH & SAFETY MEASURES FOR INDOOR AIR QUALITY

It should be noted that some recommendations such as ultraviolet germicidal irradiation, pressurization, enhanced filtration, temperature and humidity control, increased outdoor air ventilation/change rates, or bypassing heat recovery may result in increased energy usage. While some of our onpremise offerings are currently suspended, please visit our Home, Business and Multi-Family pages on the home page of MassSave.com to read about the offerings that are currently available. To help mitigate potential increases in energy use, the Program **Administrators recommend** reviewing our energy savings tips to see what energy efficiency opportunities exist for your home or business.

<sup>&</sup>lt;sup>2</sup> Source: Mass Save masssave.com/en/covid19-update

<sup>&</sup>lt;sup>3</sup> Based on primary research with HVAC contractors in the Pacific Northwest, and guidance by ASHRAE.

<sup>&</sup>lt;sup>4</sup> Sidebar excerpt from <a href="https://www.masssave.com/en/covid19-update">https://www.masssave.com/en/covid19-update</a>. Emphasis added.

<sup>&</sup>lt;sup>5</sup> https://www.ashrae.org/file%20library/technical%20resources/covid-19/guidance-for-residential-buildings.pdf

cleaners) with HEPA filters; and running bathroom exhaust fans "preferably continuously."

Given that many of these mitigation techniques require energy – and likely an increase in energy consumption over a pre-COVID baseline – EcoMetric believes the pandemic presents new opportunities for DNREC to:

- 1) Further study the energy impacts of employing IAQ measures and behaviors;
- 2) Assess energy saving potential from efficient models of air cleaners, bathroom fans, and motors used in mechanical ventilation;
- 3) Expand reach of, and adjust messaging of marketing for existing IAQ-related incentives (e.g. furnaces, other HVAC), to emphasize COVID-era potential for increased hours of use from running fans in continuous mode for better IAQ.
- 4) Consider a new EEIF program pathway to incentivize efficient equipment related to IAQ.

# 3 POLICY WHITE PAPERS

In addition to research on the national utility response to the pandemic, EcoMetric's secondary research found policy white papers advocating for tangible actions to help the US navigate out of the pandemic. These policy positions advocate for a national stimulus, similar to ARRA<sup>6</sup>, that emphasizes economic growth, jobs, clean energy and climate, and energy efficiency. As Massachusetts has done, increasing incentives for energy efficiency equipment is one action that can have an immediate impact on energy costs, comfort, and potentially indoor air quality.

EcoMetric recognizes that energy utilities and energy efficiency administrators have limited authority to directly change federal and state policy. However, a common paper recommendation is to expand upon existing energy efficiency programs to the extent possible, which provides economic stimulus in the form of jobs, increases building efficiency, and in some cases supports economic justice by way of alleviating the energy burden of low-income customers.

We summarize the relevant policy recommendations of three such white papers here:

# CALIFORNIA EFFICIENCY AND DEMAND MANAGEMENT COUNCIL (CEDMC)

On August 21, 2020, CEDMC released *How the Energy Efficiency and Demand Response Industry Can Navigate Through the COVID-19 Crisis: A CEDMC White Paper.*<sup>7</sup> The paper outlines the unique challenges and opportunities the COVID era presents, and advocates for state regulators and program administrators to make changes to program requirements in order to accelerate the delivery of efficiency services. The authors assert that California should suspend some regulatory barriers (e.g. cost effectiveness thresholds, allowing existing conditions baselines, accelerating approvals) that would enable programs to expand, leading to employment growth, improved economic activity, advancing toward climate and emissions goals, and "driving valuable bill reductions and positive social impact.<sup>8</sup>"

The paper also makes the case for diversity, equity, and inclusion in program enhancements, including non-resource initiatives such as education and training to support an energy efficiency workforce that is representative of diverse communities throughout the state.

<sup>&</sup>lt;sup>6</sup> American Recovery and Reinvestment Act, 2009. <a href="https://www.congress.gov/bill/111th-congress/house-bill/1/text">https://www.congress.gov/bill/111th-congress/house-bill/1/text</a>

<sup>&</sup>lt;sup>7</sup> https://cedmc.org/wp-content/uploads/2020/08/CEDMC-COVID-19-Response-White-Paper-%E2%80%93-FINAL-8.21.20-1.pdf

<sup>&</sup>lt;sup>8</sup> Page 8

# **ROOSEVELT INSTITUTE**

One white paper,<sup>9</sup> titled *A Green Recovery: The Case for Climate Forward Stimulus Policies in America's COVID-19 Recession Response*, was released on October 29, 2020 by the Roosevelt Institute<sup>10</sup> and makes the case for three "Fast-acting green policies to enhance immediate relief efforts." Though two of the three recommendations are geared toward government and not immediately actionable for DNREC (including tax credits and green infrastructure spending) the first recommendation is to expand funding and eligibility for LIHEAP and WAP. With respect to WAP, DNREC may be able to have a meaningful impact relatively quickly by expanding **both funding and eligibility** for WAP. The quote below characterizes the potential benefits of such an action:

"[This expansion] could provide lasting financial relief to millions of families in the US by subsidizing and permanently reducing their energy costs, while also creating thousands of jobs—and fast. As importantly, these investments would disproportionately help the same communities hurt most by the recession and COVID-19." – Roosevelt Institute White Paper, page 22

# GLOBAL COMMISSION FOR URGENT ACTION ON ENERGY EFFICIENCY

The third paper we reviewed was published in June 2020 by the International Energy Agency (IEA)'s Global Commission for Urgent Action on Energy Efficiency, titled simply *Recommendations of the Global Commission*<sup>11</sup>. Similar to the Roosevelt Institute paper, the recommendations are mostly geared toward whole-of-government approaches to drive job creation, provide financing, leverage digital innovation, and foster international cooperation, for example. But taken together with our other reviewed literature and primary research findings, a picture emerges of various organizations making the case for essentially the same thing: To utilize energy efficiency (and renewable energy) programs as a lever to quickly stimulate the economy while also providing tangible assistance to people in their homes and businesses, advancing green policy, and making progress toward climate change mitigation goals.

<sup>&</sup>lt;sup>9</sup> https://rooseveltinstitute.org/wp-content/uploads/2020/10/RI\_AGreenRecovery\_Report\_202010.pdf

<sup>10</sup> https://rooseveltinstitute.org/

 $<sup>^{11}\ \</sup>underline{https://iea.blob.core.windows.net/assets/d40d5638-1f45-42ac-b072-fe9e6417cc1e/Global-Commission-Recommendations.pdf}$ 

We recommend that DNREC examine what they can do within their purview as a state agency to increase available funding, drive program participation, and expand outreach to enable full utilization of available program resources.

# **4 RECOMMENDATIONS**

The COVID-19 pandemic has created a crisis that has dramatically altered the way we now live, work, and indeed, use energy in 2020 (and will continue to into next year). Based on our review of other national utilities' and energy administrators' response to the crisis, together with a review of the literature and our own interviews with Delaware's energy efficiency/renewable energy program actors, we considered a wide range of possible actions to help DNREC expand the reach of its energy efficiency and renewable energy program resources. We present the following recommendations to provide tangible relief and assistance to Delaware's citizens during this unprecedented time.

Our recommendations range from relatively minor adjustments to existing programs, to new marketing/messaging, to expanding the eligibility requirements and funding for the income qualified Weatherization Assistance Program, to conducting new research into newly in-demand indoor air quality measures.

# 1. Streamline EEIF approval process.

Contractors recommended that DNREC streamline approval processes. Specifically, the contractors we interviewed suggested speeding up the review of grant applications, saying incentive funds are even more crucial than ever as a result of the pandemic. In August 2020, DNREC hired a third-party implementer to assist in the implementation of the EEIF program. EcoMetric met with the implementation team in November 2020 to discuss how the EEIF program could streamline the approval process based on the aforementioned contractor recommendations. The discussion included the importance of communicating expectations to the participants (and contractors) early in the application process as well as standardizing calculation tools and forms.

# 2. Harness COVID-related changes to home energy usage to drive participation in GEP.

There were two key takeaways from our primary research with GEP participants:

- GEP Participants say they are now even more motivated to be energy efficient. GEP participants
  generally describe themselves as highly sustainable and energy-efficiency minded people. Our
  research showed that the COVID-19 pandemic further heightened this participant group's
  commitment to efficiency, with some participants looking ahead to their next action, citing
  electric vehicles, home insulation, and other planned measures.
- About half of surveyed GEP participants reported an increase in home energy use due to COVID-related work from home orders.

Given these findings, we recommend that DNREC consider tailoring GEP marketing to residential customers who may find themselves spending more time at home due to the pandemic. Some ways to do this:

- **Highlight testimonials** from satisfied GEP participants who expressed gratitude for their home's generation capability, which lowers their energy bill and mitigates some of the increased energy consumption impacts of working/attending school from home (see the highlighted quote in Section 1.3 above).
- **Assist contractors in direct outreach** to potential customers with the goal of "widening the net" of aware and informed customers.

# 3. Expand WAP offerings.

WAP is a way to provide direct assistance to some of Delaware's most vulnerable citizens. Research shows that low income households have been disproportionately affected by the COVID recession. Immediate weatherization upgrades will improve safety and comfort of homes while also providing local jobs, reducing energy burden, and stimulating the broader economy.

We recommend that DNREC:

- Explore avenues, including direct advocacy for emergency state and federal funding, to
  - o Temporarily increase subsidization levels, and
  - o Loosen the income eligibility thresholds for the WAP program.
- Continue to conduct outreach and create new community partnerships to enroll Delaware's most vulnerable citizens in WAP in a pandemic-safe manner. For example, consider partnering with food pantries and community centers providing other forms of direct relief.

# 4. Offer additional financial assistance for non-income-qualified residential customers.

There may be an opportunity to help provide further stimulus for residential consumers. For example:

- Consider temporarily increasing incentive amounts for residential measures, similar to what has already been done with Energize Delaware programs.
- Explore a Home Energy Report (HER) or other residential behavioral offering, which entails direct communication with customers. In addition to building relationships with customers and encouraging behavior change, HERs could provide an additional outreach vehicle for COVIDrelated information, program changes and updates.
- Assess the feasibility of offering on-bill financing or other innovative, no- or low-interest financing mechanisms for residential efficiency upgrades.
- Consider offering free home energy assessments, either in-person or remotely.

# 5. Create a Small Business Direct Install (DI) Program.

As DNREC does not currently have a dedicated small business offering, we recommend exploring the opportunity to provide stimulus to small businesses who are struggling to survive the pandemic. The EEIF program is open to small businesses, but it is not specifically designed for them. Delaware is home to thousands of strip malls, small restaurants, local shops, etc. A DI-style program (or a DI pathway as part of EEIF) would more directly address the needs of those business types. Funds from EEIF could be set aside for such an offering.

More information related to DI programs can be found in Appendix A.

# 6. Promote state policy changes.

DNREC may have the ability to drive the conversation toward immediate changes to statutory requirements that would accelerate the deployment of additional energy efficiency programs. Such an acceleration/expansion would provide many benefits to Delaware including:

- Employment opportunities in the energy sector
- Stimulus for economic growth post COVID-19
- Relief of increased energy burden resulting from more time spent at home
- Social and economic benefits for vulnerable populations (e.g. reduced energy burden, new employment opportunities)
- Advancing toward emissions reduction goals for all programs
- Achieving long-term benefits such as:
  - Increased renewable energy generation capacity
  - Permanent efficiency improvements to residential and commercial buildings
  - Non-energy benefits for rate payers (i.e. improved comfort, reduced noise, fewer sick days)

Examples of more immediate regulatory changes might include:

- Loosening cost-effectiveness thresholds
- Modifying cost effectiveness criteria (reducing TRC requirement of 1.0 or greater) or moving away from TRC, at least for the duration of the COVID-19 crisis. A possible TRC replacement is the Program Administrator Cost (PAC) test, as recommended in the California white paper<sup>12</sup>. This would enable greater flexibility such as not penalizing private investment in energy efficiency measures.
- Allow existing conditions baselines
- Accelerate approvals

<sup>&</sup>lt;sup>12</sup> https://cedmc.org/wp-content/uploads/2020/08/CEDMC-COVID-19-Response-White-Paper-%E2%80%93-FINAL-8.21.20-1.pdf page 11.

Promote fuel switching to higher efficiency equipment

# 7. Indoor Air Quality: Incentivize and sponsor research into efficient indoor air quality measures.

Determine whether opportunities exist to offer incentives for IAQ measures that may see increased usage as a result of the pandemic. As explained in section 2.1.3, we recommend DNREC:

- Sponsor further study into the energy impacts of employing IAQ measures and behaviors in both residential, commercial, and institutional buildings such as schools and universities;
- Assess energy saving potential from efficient models of air cleaners, bathroom fans, and motors used in mechanical ventilation;
- Expand reach of, and adjust messaging of marketing for existing IAQ-related incentives (e.g.
  furnaces, other HVAC), to emphasize COVID-era potential for increased hours of use from running
  fans in continuous mode for better IAQ.
- Consider a new EEIF program pathway to incentivize efficient equipment related to IAQ, including –
  as recommended by ASHRAE<sup>13</sup> HVAC retrofit projects that prioritize fresh air and return air
  filtration. Prioritize creating a pathway for schools and other essential childcare institutions.

"The underlying effort of the [retrofit] designer should be to increase outside air to the spaces and treat return air." ASHRAE Guidance for School Indoor Air Quality

# 8. Increase Marketing and Outreach.

Consider taking advantage of this opportunity to connect (or reconnect) with homeowners and business owners throughout the state with the following actions:

- Increase education and publicity for the weatherization assistance program (WAP), to both residents and contractors.
- Remind commercial and industrial facilities (i.e. potential EEIF and E2I grant recipients) of the
  grant rates and types of projects that would be eligible. Add more measure pathways to the
  EEIF program to streamline documentation for applications.

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<sup>&</sup>lt;sup>13</sup> https://www.ashrae.org/technical-resources/reopening-of-schools-and-universities

- Increase publicity for the State Energy Program Revolving Loan Fund and remind facilities that a loan can be used to supplement an EEIF grant project. Keep in mind that some businesses may be using this time of reduced occupancy to implement building upgrades.
- Coadvertise the Energize Delaware Empowerment Grant through Delmarva<sup>14</sup> (although this does not appear to be new funding, there is opportunity to advertise with a focus on how COVID has changed the way we consume energy.)

# 9. Update website.

DNREC should consider updating its website further to become a clearinghouse for information related to energy efficiency and financial support for residents and business owners during the COVID-19 era. The new EEIF implementer could support this work. Examples of the types of information that could be included:

- Information and links to sources of state and federal funding available to business owners
- Energy efficiency tips for homes
- Energy efficiency tips for businesses
- Links to resources such as ASHRAE
- Links to state energy efficiency programs (see summary in next section).

<sup>&</sup>lt;sup>14</sup> https://philanthropydelaware.org/resources/Documents/Member%20News%20-%20Energize%20Delaware%20Oped%20Empowerment%20Grant.pdf



# APPENDIX A – DELAWARE SMALL BUSINESS OFFERINGS

Direct install or direct incentive (DI) programs are energy incentive programs for small businesses in which the project contractors receive the financial incentive. This allows for the project cost to the small business to be significantly discounted – sometimes up to 100%. This is attractive and helpful for many small businesses, since large amounts of upfront capital are not required to implement energy efficiency upgrades. In addition, the contractors are often responsible for all paperwork – applications and otherwise – further reducing strain on the small business owner. DI programs are popular in numerous jurisdictions.

To the best of our knowledge, Delaware does not currently offer any DI programs, though there are a couple programs within the state directed at small businesses:

The Delaware Municipal Electric Corporation (DEMEC) supports the Efficiency Smart initiative, which includes a small business program, for eight towns in Delaware:

0	C	lay	to	n

Lewes

Middletown

Milford

New Castle

Newark

Seaford

Smyrna

The following services and financial incentives are offered through Efficiency Smart:

Residential	Small Businesses	Large Businesses
• Equipment rebates	Energy efficiency	Energy efficiency
<ul> <li>Discounted</li> </ul>	improvement	improvement
products online	incentives	incentives
<ul> <li>Appliance</li> </ul>	<ul> <li>Bonuses for</li> </ul>	<ul> <li>Energy audits</li> </ul>
recycling	purchasing locally	<ul> <li>Consultative</li> </ul>
<ul> <li>Plug-in electric</li> </ul>	<ul> <li>Technical advice</li> </ul>	services
monitor		<ul> <li>Technical</li> </ul>
<ul> <li>Electric bill advice</li> </ul>		assistance
<ul> <li>Online energy</li> </ul>		<ul> <li>Usage and savings</li> </ul>
assessment		analyses



In addition, Energize Delaware offers the following for commercial facilities:

- Property Assessed Clean Energy (D-PACE) financing
- Low-interest loans
- Technical and financial assistance for multifamily Housing
- Solar Renewable Energy Credits (SREC)
- Energy assessments

# APPENDIX B - SECONDARY COVID SUPPORT SUMMARY - RESIDENTIAL

Figure 4: Available Utility and Energy Administrator Support for Residential Customers by State

Type of Support	California	Massachusetts	Illinois	Pennsylvania	Maryland	Washington DC	Connecticut	Michigan	Wisconsin
Delaying Planned Outages	Χ								
Donations and Contributions to Charities, Non-Profit Organizations, & Relief Funds	Х	Х		Х				Х	X
Suspending Service Disconnections	Х	Х	Х	Х	Х	Х	Х	Х	Х
Low-Income Bill Assistance	Х	Х	Х	Х		Х	Χ	Х	
Bill Credits	Х	Χ		Χ	Χ	Χ		Χ	
Flexible Payment Plans	Х	Х	Х	Х			Χ	Х	
Virtual Home Energy Assessments		Χ							
Posted Resources for At-Home Energy Efficiency	Х	Χ	Χ	Χ			Χ		
Extended Application Deadlines		Χ					Χ		

# APPENDIX C - SECONDARY COVID SUPPORT SUMMARY - NONRESIDENTIAL

Figure 5: Available Utility and Energy Administrator Support for Non-Residential Customers by State

State / Jurisdiction	California	Massachusetts	Illinois	Pennsylvania	Maryland	Washington DC	Connecticut	Michigan	Wisconsin
Delaying Planned Outages	Х								
Donations and Contributions to Charities, Non- Profit Organizations, & Relief Funds	Х	X		X				X	Х
Suspending Service Disconnections	Х	Х	Х	Х		Х	Х		Х
Flexible Payment Plans	Х	Х		Х			Х		
Reduced Utility Rates	Х					Χ			
Loan Deferral / Flexible Repayment Options	Х	Χ			Χ		Χ		
Posted New Tips for Energy Efficiency	Х	Х	Χ	Х	Х	Χ	Х	Х	Х
Virtual Pre- and Post-Install Inspections		Χ				Х	Χ		
Automatic Pre-Approval of Small Projects						Χ			
Additional Outreach / Marketing					Х				
New / Increased Grant Allowances			Χ	Х	Х		Х		
Increased Incentives for Upstream & Midstream Programs		Χ				Χ	Х		
Increased Incentives for Small Business / Direct Install Programs		Χ					Χ		
Free Educational Courses / Webinars	Х			Χ					
Free Thermostat with Audit			Χ						
Providing Resources for Empty Facilities and Re- Opening Facilities		Χ							
Connecting Small Businesses to Potential Sources of State/Federal Funding	Х	Х	Χ	Х	Χ	Х	Х	Х	Х
Employees Taking Customer Service Calls from Home		Х						Х	