Finance Options

Kristy Manning
Director, Division of Energy
Finance Options Available Now

$ Energy Loan Program
$ PACE
$ Federal CHP Tax Credit
$ Third Party Providers
Energy Loan Program FY2018 Cycle

$5M available

2.75% interest rate

- Up to 10-year loan repayment
- Bi-annual payments
Eligible Entities Suitable for CHP

- Public & Private Not-For-Profit Hospitals
- Public & Private Educational Institutions
- Counties
- Sewer Districts
- Cities
- Water Supply Districts
Renewable/Distribution Energy

- Biomass Boiler Systems
- Combined Heat and Power
- Solar Photo Voltaic Systems
HVAC Upgrades

- Geothermal Heat Pump
- Building Automation
- Variable Frequency Drives
- Variable Refrigerant Flow
- Chiller Replacements
- Cooling Tower Replacements
Lighting Upgrades

- Lighting Controls
- Outdoor Lighting
- LED Exit Signs
- Occupancy Sensors
- Indoor Lighting Upgrades
- LED Wall Pack Upgrades
# Energy Loan Program Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chatchai Pinthuprapa</td>
<td>Program Coordinator</td>
<td>(573) 526-7770</td>
<td><a href="mailto:chatchai.pinthuprapa@ded.mo.gov">chatchai.pinthuprapa@ded.mo.gov</a></td>
</tr>
<tr>
<td>Dan Dahler</td>
<td>Project Manager</td>
<td>(573) 522-3371</td>
<td><a href="mailto:daniel.dahler@ded.mo.gov">daniel.dahler@ded.mo.gov</a></td>
</tr>
<tr>
<td>Ron Seyl</td>
<td>Project Manager</td>
<td>(573) 526-4623</td>
<td><a href="mailto:ronald.seyl@ded.mo.gov">ronald.seyl@ded.mo.gov</a></td>
</tr>
</tbody>
</table>

[http://energyloan.mo.gov/](http://energyloan.mo.gov/)
Property Assessed Clean Energy (PACE)

- Voluntary special assessment on property tax bill
- Provide 100% upfront cost
- Fixed rate loan up to 20 years
- Annual energy savings > project cost
PACE— Eligibility

- Publicly or privately owned property
- Commercial and residential available
- New construction or retrofits
- Reduce energy consumption; build to a more resilient, higher standard
PACE—Measures

- Combined heat and power systems
- Automatic energy control systems
- HVAC systems
- Renewable energy systems, including photovoltaic, solar thermal, wind, biomass, geothermal
MCeD.mo.gov
Missouri Clean Energy District

Make A Difference Today:
866-554-4083
# PACE Contacts

<table>
<thead>
<tr>
<th>Missouri Clean Energy District</th>
<th>Show Me PACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(800) 748-9986</td>
<td>(573) 616-1046</td>
</tr>
<tr>
<td><a href="http://www.mced.mo.gov">www.mced.mo.gov</a></td>
<td><a href="http://www.showmepace.org">www.showmepace.org</a></td>
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</table>

<table>
<thead>
<tr>
<th>Set the PACE St Louis</th>
<th>Missouri Energy Savings Program (St. Louis County)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(314) 499-8756</td>
<td>(314) 499-8756</td>
</tr>
<tr>
<td><a href="http://www.setthepacestlouis.com">www.setthepacestlouis.com</a></td>
<td><a href="http://www.mo-esp.com">www.mo-esp.com</a></td>
</tr>
</tbody>
</table>
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*www.energy.gov/savings/business-energy-investment-tax-credit-itc
Federal Business Energy Investment Tax Credit

**Eligibility:**
- Commercial
- Industrial
- Investor-Owned Utilities
- Cooperative Utilities
- Agriculture

**Savings Categories:**
- Solar Photovoltaics
- Wind (All)
- Geothermal Heat Pumps
- Municipal Solid Waste
- Combined Heat & Power
- Fuel Cells using Non-Renewable Fuels
- Tidal
- Wind (Small)
- Geothermal Direct-Use
- Fuel Cells using Renewable Fuels
- Microturbines
Federal Business Energy Investment Tax Credit

**CHP**
- 10% of expenditures
- Up to 50 MW
- > 60% efficiency
- After 10/3/2008

**Microturbines**
- 10% of expenditures
- Up to 2 MW capacity
- > 26% efficiency
- $200 per kW
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Third Party Providers

- Capable of providing a turnkey CHP system to serve a facility.
- Generally an Energy Services Company (ESCO).

Energy Service Companies (ESCOs) contract with private and public sector energy users to provide energy efficiency retrofits across a wide spectrum of sectors and facilities. ESCOs have implemented significant comprehensive energy efficiency retrofit projects over the last three decades effectively utilizing a performance-based contract business model.
Resources for Finding an ESCO

You may already be working with an ESCO because they often offer products and services common to facilities.

National Association of Energy Service Companies
www.naesco.org/

■ Energy Services Coalition www.energyservicescoalition.org/
■ Federal Energy Management Program list of qualified providers
Energy Savings Performance Contract (ESPC)

An institution enters into a contract (up to 15 years) with an ESCO which is responsible for developing and implementing an energy savings plan and installing energy efficiency upgrades.

The resulting energy savings are used to pay for the upgrades over time.

ESCO guarantees the projected energy savings and provides ongoing reports verifying the actual savings.

www.energy.gov/sites/prod/files/2017/05/f34/ESPC_DBB.pdf
Energy Service Agreements (ESA)

■ Pay-for-performance, off-balance sheet financing solution that allows customers to implement energy efficiency projects with zero upfront capital expenditure.
■ ESA provider pays for all project development and construction costs.
■ Once a project is operational, the customer makes service charge payments for actual realized savings.
■ The price per unit of savings is a fixed output-based charge that is set at or below a customer’s existing utility price, resulting in immediate reduced operating expenses.

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Kristy Manning, Director, Division of Energy

Department of Economic Development
Division of Energy
<table>
<thead>
<tr>
<th>Sector Entities</th>
<th>Number of Energy Loans</th>
<th>Loan Amount</th>
<th>Annual Savings</th>
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<tbody>
<tr>
<td>Colleges/Universities</td>
<td>18</td>
<td>$10,310,302</td>
<td>$1,513,198</td>
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<tr>
<td>Hospitals</td>
<td>13</td>
<td>$6,147,114</td>
<td>$898,274</td>
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<tr>
<td>Local Governments</td>
<td>160</td>
<td>$19,839,595</td>
<td>$3,099,784</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>$85,199</td>
<td>$28,391</td>
</tr>
<tr>
<td>Public Schools</td>
<td>405</td>
<td>$70,446,589</td>
<td>$10,160,120</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>598</strong></td>
<td><strong>$106,828,799</strong></td>
<td><strong>$15,699,767</strong></td>
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