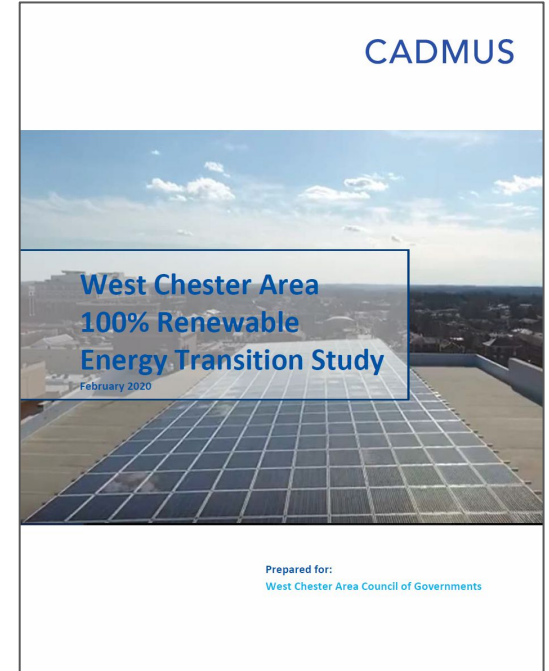


West Chester Area 100% Renewable Energy Transition Study

Summary of Cadmus Report
July 2020

Prepared by Jim Wylie & Henry Alexander



Agenda

- 1. Introductions, people and roles**
- 2. Brief History of Project**
- 3. Context**
- 4. Role of Municipal Gov**
- 5. Cadmus List**
- 6. Recommendations**
- 7. Role of Community**
- 8. Q & A**

Introductions, people and roles

What is the COG?

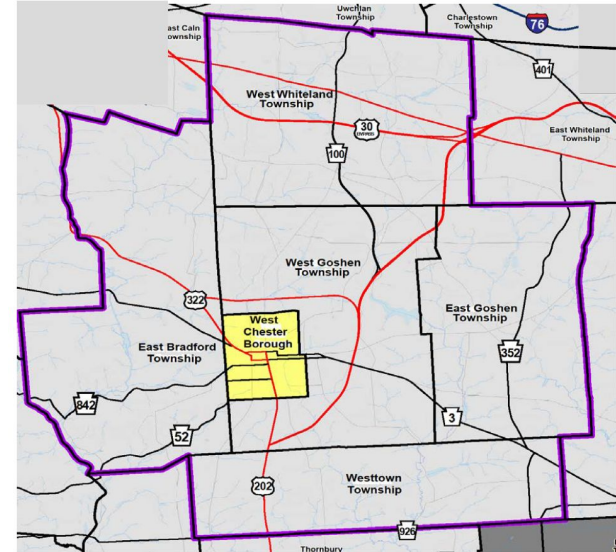
What is the Advisory Group?

Who is Cadmus?

Glossary of terms/jargon - distributed before meeting

CADMUS

cadmusgroup.com/



Brief History of the West Chester Area Energy Transition Planning Project

- RFP issued by COG - 9 proposals - Cadmus Group contract for \$75k
- Approved by 6 municipalities (Thornbury opts out) - fee split by population %
- 4 month project planned (turned into 9 month effort)
- Stakeholder intake interviews and public visioning
- Advisory Group provides oversight and feedback to study development
- Final report and overview presentations are here -

sites.google.com/view/wcacog-100-re-transition/home

Stakeholder Interviews

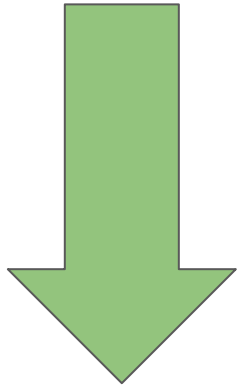
Stakeholder Contacted

- County Commissioners
- All township supervisors
- Diane Lebold
- PECO
- PA Dept. of Env. Protection
- West Chester University
- West Chester Area School District
- SEPTA
- West Goshen Twp. Sewer Authority
- Synthes (Johnson & Johnson)
- The Hankin Group
- QVC
- West Chester Area Chamber of Commerce
- Chester County Hospital
- Chester County Housing Authority
- E. Khan Development
- Main Street at Exton

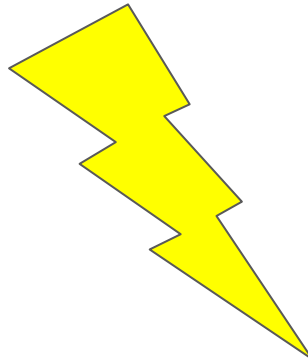
Context

To achieve 100% renewable energy, the West Chester Community must:

Reduce



Electrify



Transition



Focus of Cadmus Study

Context

West Chester is not doing this alone.



30 municipalities in greater Phila area have passed 100% RE resolutions. 15 more expected in 2020.

Chester County Commissioners Approve Environmental and Energy Advisory Board Appointments - Feb 12, 2020

www.chesco.org/civicalerts.aspx?aid=1052

Radnor Twp Renewable Energy and Conservation Planning Services Contract - Jan, 2020

Cheltenham Twp subcommittee puts together an outline of a Renewable Energy Transition Plan for Cheltenham and establishes a Transition Plan Taskforce - March, 2019

Phoenixville Area Clean Energy Working Group Established to do community outreach and support PRPC planning efforts. Spring, 2019 www.pat.community/clean-energy

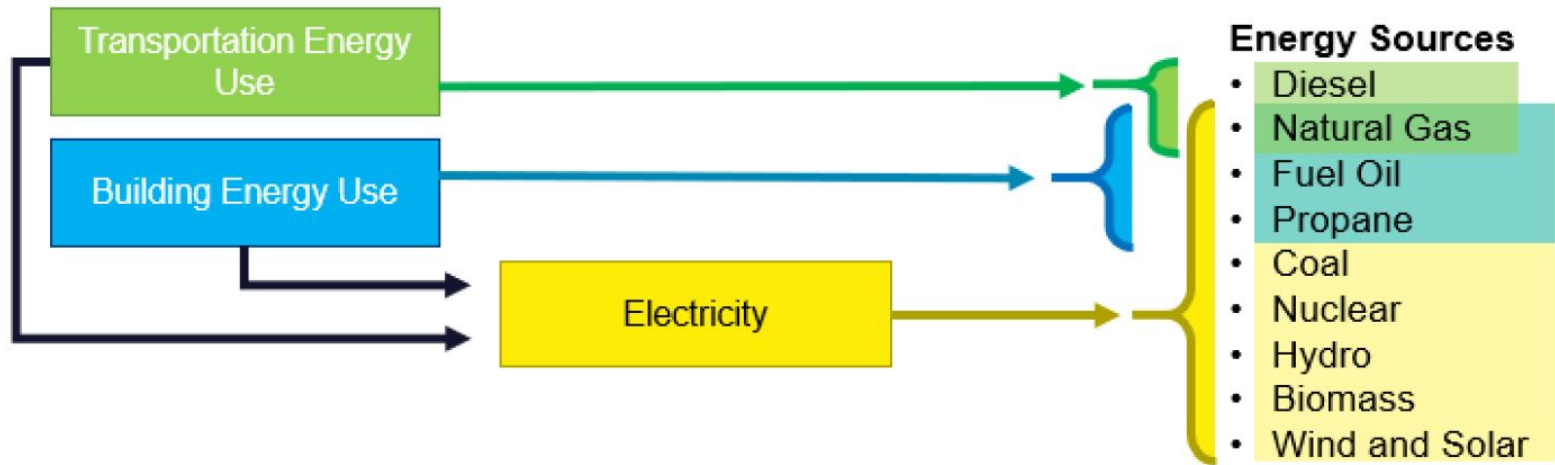


Figure 2: Energy Model Workflow

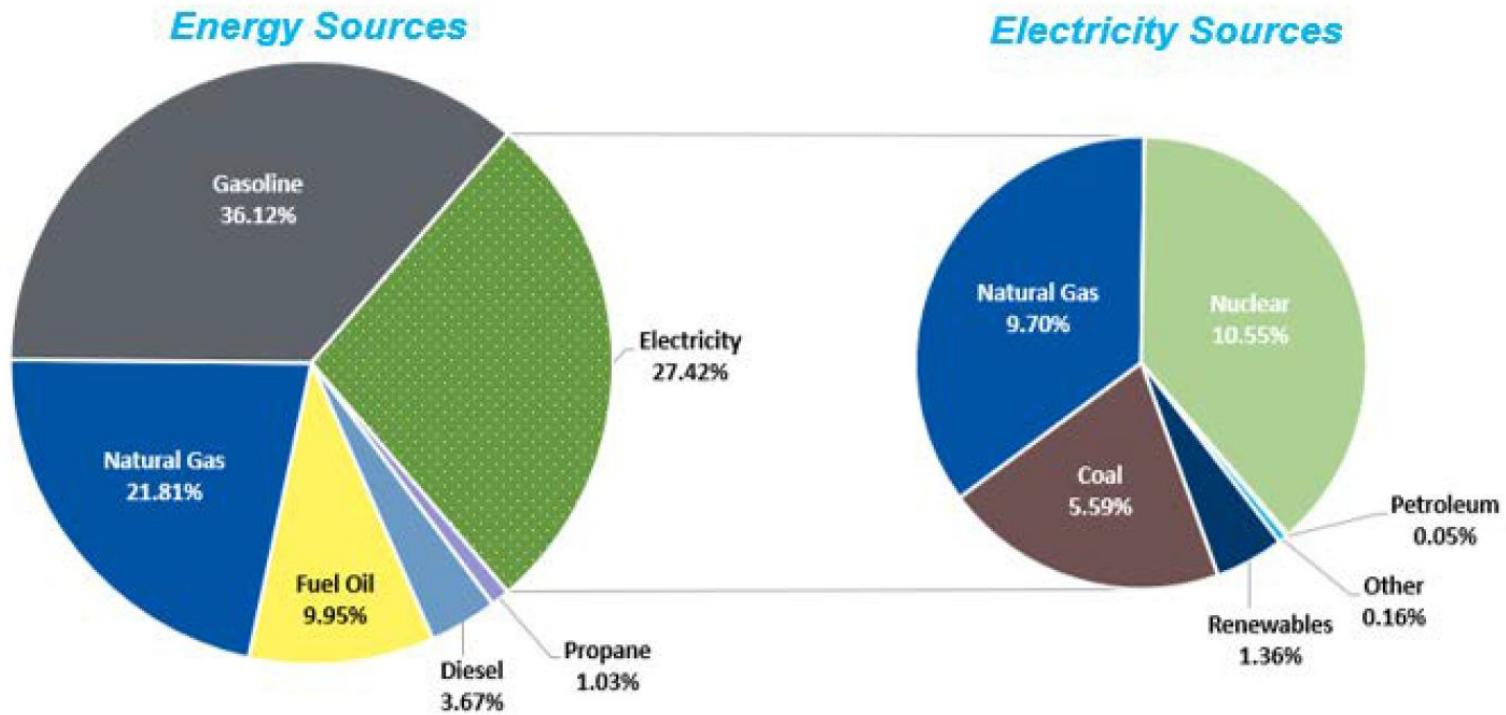


Figure 3: Energy Consumption by Fuel Type

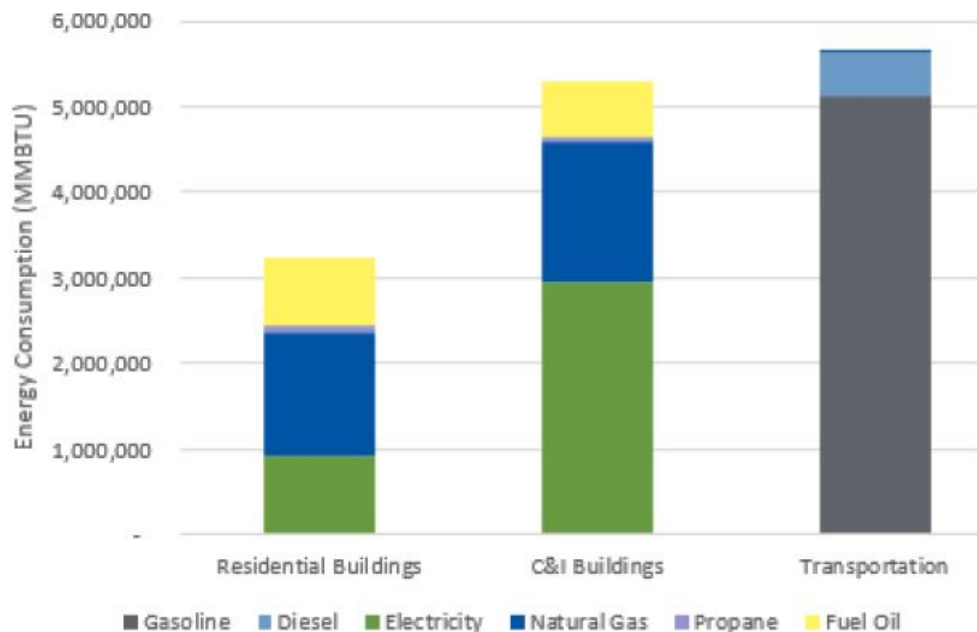
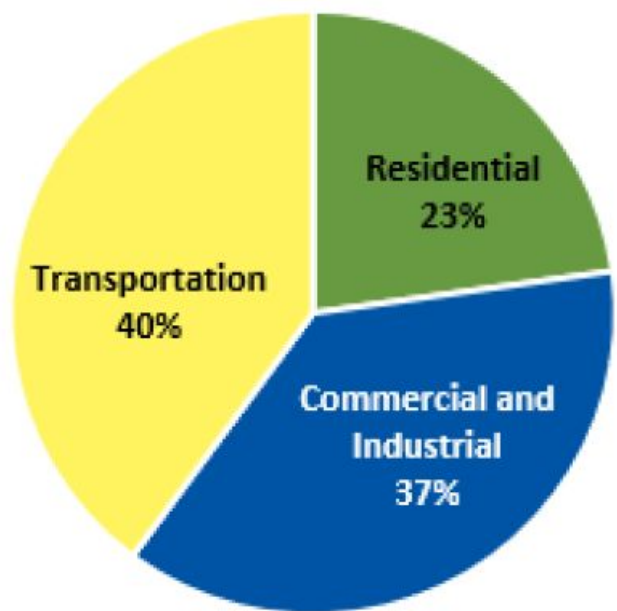


Figure 4: Breakdown of Energy Consumption by Sector and Fuel Source in 2018

Role of Municipal Gov

Lead by example

Reduce/Electrify/Transition Muni Facilities

Educate

Communicate to community: goals, options, motivation

Encourage

Zoning, preferential permitting, other incentives

Facilitate

Convene task forces, play matchmaker, organize aggregated purchasing

Regulate

New construction restrictions, benchmarking & disclosure

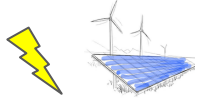
Collaborate

With other COG munis, county, DVRPC, state

Cadmus Recommended Strategies

Category 1: Enabling Strategies

Things that open the door to systemic changes in the community - Solar guidelines, EV readiness, electrification planning



Category 2: Community Engagement Strategies

Things that educate the community about goals and opportunities

Category 3: Municipal Supply Mix Strategies

Things that help transition the municipal facilities and fleets to 100% renewable energy sources



Category 4: State Level Options

Things that we could benefit from PA legislative changes to help us reach our goals - like Community Solar



Energy Reduction Strategies

Things that reduce our energy demand and save \$ to invest in long term EE/RE opportunities - like geothermal and on-site solar



Cadmus Recommended Strategies

	<u>Enabling Strategies</u>
1.1	Encourage Solar Ready Guidelines
1.2	Streamline Interconnection Processes
1.3	Pass EV-Ready Ordinances
1.4	Install Public Charging Stations for EVs
1.5	Develop a Building Electrification Roadmap
	<u>Community Engagement Strategies</u>
2.1	Initiate Renewable Energy Educational Campaigns
2.2	Establish and/or Participate in Group Purchasing Campaigns
2.3	Engage the Community in Setting Energy Goals
2.4	Initiate Renewable Heating and Cooling Marketing Campaigns

	<u>Municipal Supply Mix Strategies</u>
3.1	Install Renewable Energy On-Site to Supply Municipal Operations
3.2	Procure Renewable Energy from Retail Electricity Providers
3.3	Power Purchase Agreement: Partner with a Third Party to Procure Renewable Energy (PPA)
3.4	Purchase Renewable Energy Certificates (RECs)
3.5	Lead by Example in Building Facilities (Building Electrification)
3.6	Procure Electric Vehicles for Municipal Fleet
	<u>State Level Options</u>
4.1	Allow for Community Solar
4.2	Allow for Community Choice Aggregation
4.3	Increase the Alternative Energy Portfolio Standard

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That's the summary of all of the Cadmus strategies.

Two questions:

- 1) What's missing?
- 2) What should we do first?



Energy Efficiency at
Municipal Facilities

- Benchmark facilities
- Identify, plan & complete EE Projects
- Green building (NZ)
- LED street lights



Electrify Fleets and
Municipal Facilities

- Electrification plan
- Evaluate solar PV
- Fleet analysis and EV/PHEV transition plan
- Public EV stations



Transition to
Renewable Energy

- Determine future electric demand
- Pursue PPA for collective municipal demand



Institute an Authority
for Municipal
Electricity Purchasing

- Create or leverage an existing Authority for group purchasing
- Issue RFP, solicit and approve contracts



Simplify Permitting &
Inspection Process for
Solar, EV Charging

- Join Solsmart
- Standardize permitting, zoning, inspection
- Staff resources to facilitate adoption

Table 1: Strategy-Level Implementation Next Steps

Near-Term Step	Enabling	Community Engagement	Municipal Supply Mix	State-Level
<p>WCACOG to consult with the Advisory Group on their recommendations based on the Cadmus Report.</p>	✓	✓	✓	✓
<p>Engage the community to review the findings of this study and offer avenues for engagement on strategies that each municipality prioritizes. Ensure engagements include previously consulted stakeholders.</p>		✓		✓
<p>Review the results of the Cadmus Team’s solar siting exercise with decision-makers.</p>			✓	
<p>Access technical assistance by joining SolSmart.</p>	✓	✓	✓	
<p>Engage with other local governments and groups (e.g. Sierra Club or Solar United Neighbors) to uncover how WCACOG municipalities can collaborate on existing efforts at the state-level, and learn from others’ local-level efforts.</p>	✓	✓	✓	✓

West Chester Borough SAC Energy Transition Team

Municipal Government Focus

Lead By Example

- **Facilities:** Benchmark, Reduce, Electrify
- **Fleets:** Benchmark, Reduce, Electrify
- **Purchase Renewable Electricity**

Policy

- Zoning
- Ordinances
- Permitting: SolSmart

Projects

- On-Site Solar
- Charging Stations

Collaborate With Other Munis As Appropriate

Community Focus

Marketing Strategy

- Information Resources
- Priority Targets

Public Engagement

- Reconnecting w/ Key Stakeholders
- Public Hearings & Community Dialogues

Progress Monitoring

Coordinate w/ reps from EACs of each muni