



The News Journal

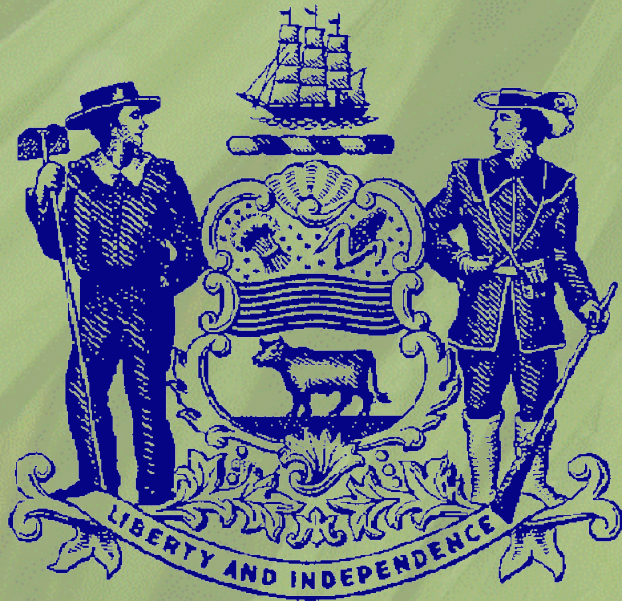


CREATING
the CLEAN
 ENERGY
 ECONOMY
 IN DELAWARE, THE REGION
 AND THE NATION

Collin O'Mara
 Secretary

Delaware Department of Natural
 Resources and Environmental Control

UNIVERSITY OF
 DELAWARE
 CREATING
 KNOWLEDGE-BASED
 PARTNERSHIPS



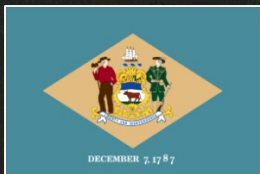
The Building Blocks of Delaware's Clean Energy Economy

**University of Delaware
February 21st, 2009**

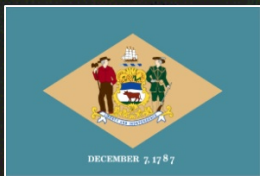
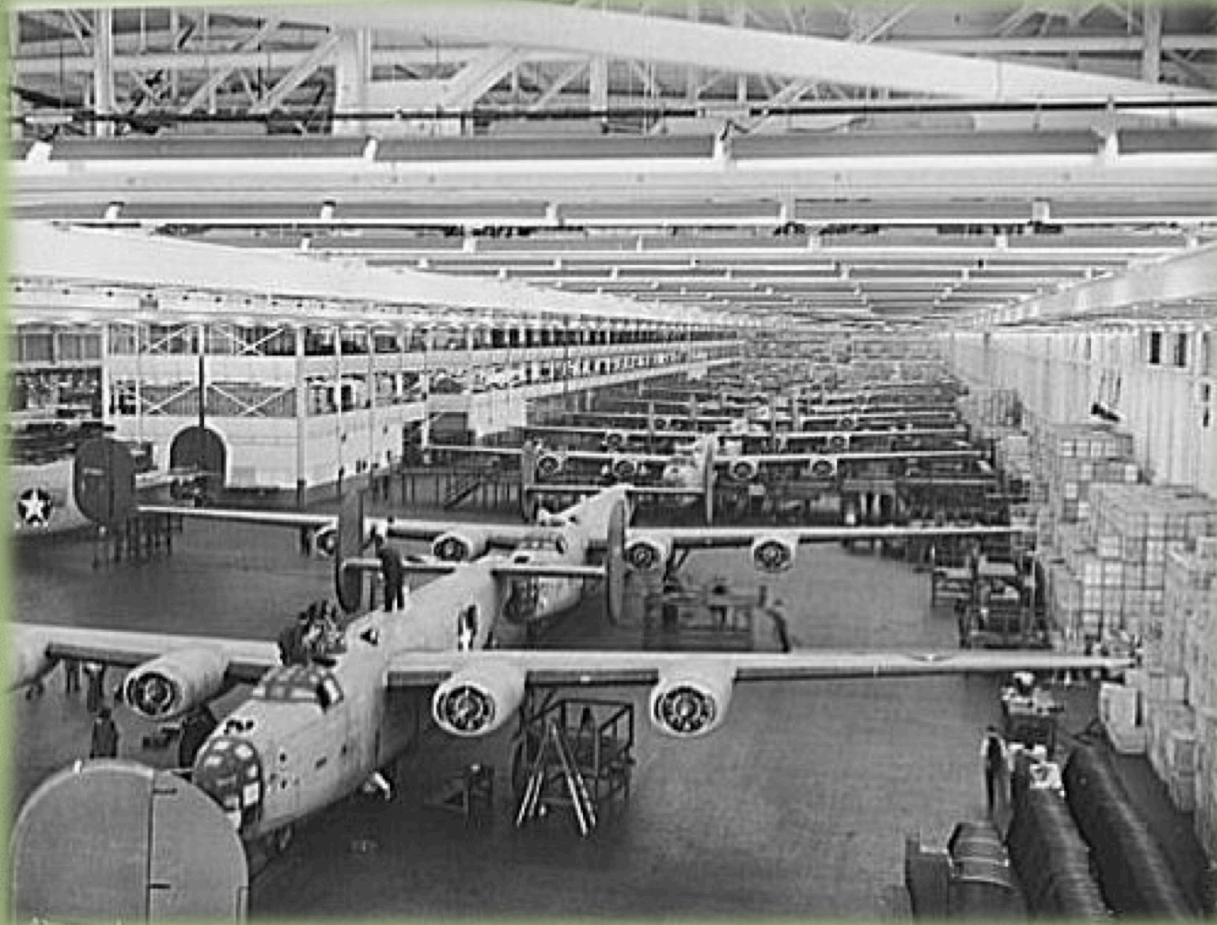


Scale of Opportunity

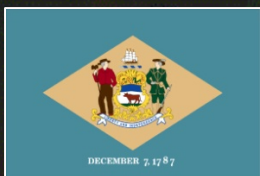
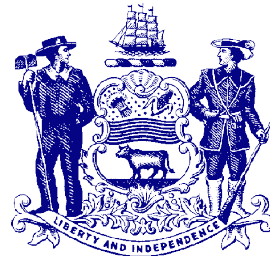
- \$6T: Size of global energy market (6x greater than internet)
- \$250B: U.S. Wealth exported to import energy
- \$120B: Est. annual health costs from energy
- 10%: Average operating budget spent on energy
- 80-90%: Reduction in GHG emissions by 2050



Scale of Opportunity

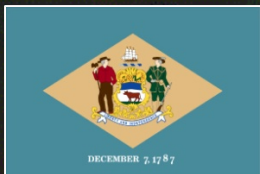


Building Blocks of our Clean Energy Economy



Fundamental Tenets

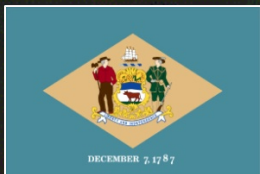
1. The transition to clean energy is good for economy & will create more jobs and prosperity than are displaced
3. Clean technology is not simply an emerging industry sector, but rather a mechanism to make the entire U.S. economy more competitive
4. The worldwide competition for clean energy jobs will be intense and success will require policy entrepreneurship & strategic partnerships



Goals of a Statewide Strategy

Statewide Goals:

- Enhance State's Competitiveness (Green Savings)
- Spur New Investment & Industries (Green Opportunities)
- Provide Range of Career Opportunities (Green Talent)
- Improve Environmental Outcomes



Creating a Clean Energy Economy

Regions can create a market and spur growth by influencing both supply & demand-side levers:

Supply Side

- ✓ Innovation & manufacturing of Clean Tech products
- ✓ Employment in Clean Tech & support industries

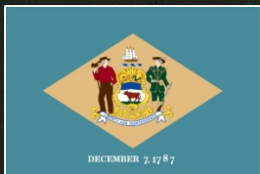
Clean Technology

Market-driven innovations that:

- ✓ Utilize renewable energy sources
- ✓ Manage energy resources more efficiently
- ✓ Reduce environmental impacts

Demand Side

- ✓ Awareness & adoption of sustainable practices
- ✓ Purchase of Clean Tech products



Delaware's Clean Energy Economy

SUPPORT GROWTH OF CLEAN ENERGY COMPANIES

INNOVATION



COMMERCIALIZATION



MANUFACTURING
& SUPPLY CHAIN



DEPLOYMENT &
OPERATIONS

JOB CREATION & WORKFORCE OPPORTUNITIES

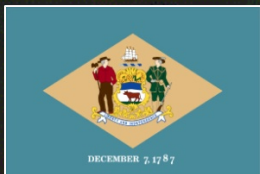
BUILDING &
OPERATIONAL
EFFICIENCY

CLEAN ENERGY

ADVANCED
TRANSPORTATION

SUSTAINABLE
PRODUCTS

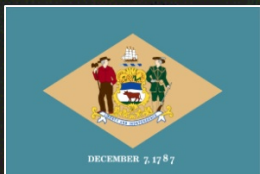
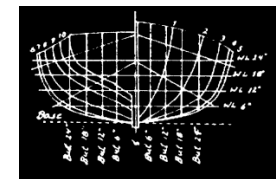
BUILD MARKET DEMAND FOR GOODS & SERVICES



Workforce Development

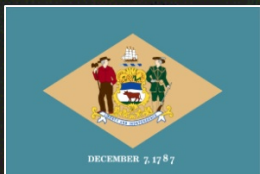
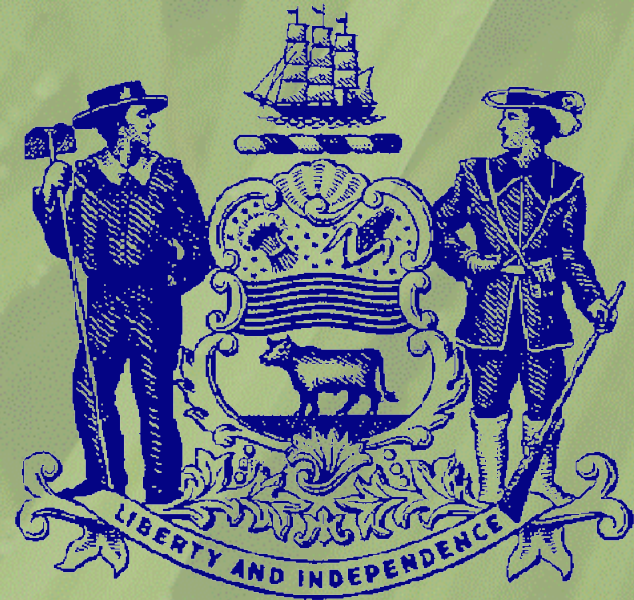
Innovative workforce programs:

- ✓ Classroom & on-the-job training programs
- ✓ Industry involvement in community college curricula
- ✓ Job placement/employee recruitment services
- ✓ Energy job training with Federal, State and private funds



Executive Order #18

1. Reduce energy use by 30%
2. Receive 30% of our electrical power from renewable sources
3. Build to LEED Silver Standard
4. Divert 75% of the waste from landfills
5. Reduce gas consumption and vehicle emissions by 25%
6. Procure environmentally responsible products



Transforming Challenges into Opportunities

Challenge: State Budget

Energy & maintenance costs

~\$35 million per year

~125,000 tons of CO₂



Spur Job Creation

Catalyze innovation/incubation

Support manufacturing/installation jobs

Create export opportunities

Generate revenues for services



Executive Order 18

Reduce operating expenses

Reduce energy use & emissions

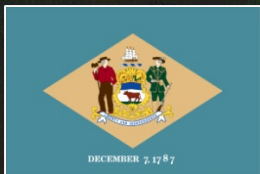
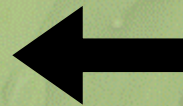
Increase renewable power



Create Market

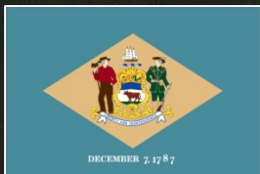
Spur demand for goods/services

Provide demonstration opportunities



How do we best seize the opportunity?

- Drive economic prosperity & wealth creation
- Reduce operating expenses
- Create well-paying jobs/careers & attract/retain talent
- Improve environmental outcomes & quality of life
- Demonstrate that economic growth & environmental sustainability are interconnected



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MANUFACTURING
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DEPLOYMENT &
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JOB CREATION & WORKFORCE OPPORTUNITIES

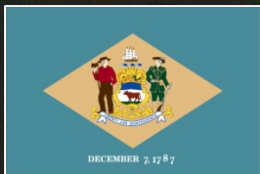
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