# Oak Ridge - Reindustrialization

# US DOE Asset Revitalization Initiative in Oak Ridge, Tennessee



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Oak Ridge

REINDUSTRIALIZATION

An Asset Revitalization Initiative

### **Vision**

By 2017, the Oak Ridge Reindustrialization Program will further its position as the model for sustainable innovative reuse of DOE assets





### **Mission**

Apply our expertise to accelerate clean-up and promote economic development by making underutilized DOE assets (e.g., buildings, land, equipment, and technology) available to enhance the development of private sector business in the region



### **Reindustrialization Program Overview**

### Over 15 years of Experience

- Lease and transfer of real property and equipment for private use
- Technology transfer combined with property transfer to facilitate new businesses
- Established private businesses co-located on site with ongoing DOE Operations





Oak Ridge
REINDUSTRIALIZATION
An Asset Revitalization Initiative

### **Asset Revitalization Initiative**

#### **Drivers &** Goals

- Legislation
- Executive Orders
- DOE **Strategic** Plan
- STEP
- Quadrennial Review
- Community Goals

#### **Partners**

- DOE : EM, SC, NNSA, NE
- CROET
- State of Tennessee
- City of Oak Ridge
- **Private Sector**
- **Other Stakeholders**

#### **Assets**

- Land & Facilities
- Infrastructure
- Natural Resources
- Trained workforce
- **Funding**
- **Communities**

#### **Asset Revitalization Initiative**

- Provides locations/assets for development, demonstration and deployment of energy technologies
- Sets a national example for development and deployment of energy technologies
- **Creates business environment** for collaborative public/ private partnerships

#### **Key Components**

- DOE provide national framework
- DOE catalyze private sector / community /energy research office collaborations to demo/deploy/diffuse clean energy technology
- Private sector/communitiesfocused implementation, with major private sector funding

- **Energy Self-**Sufficiency
- **Enhanced National** Security
- **Reduced Energy Imports**
- **Reduced Trade** Deficit
- Clean Electric **Energy**
- Reduced GHG **Emissions**
- **Green Jobs**
- Vibrant Clean **Energy Industry**
- **Enhanced National** Competitiveness
- ✓ EM program Acceleration & **Cost Reduction**





### **Solutions through Partnership**













# **Implementation Challenges**

- Define Program
- •Establish Buy-In
- Stakeholder Involvement
- Establish Legitimacy
- •NEPA/NHPA
- Private Sector Occupancy
- Private Sector Oversight
- Protect Infrastructure
- Ongoing Cleanup
- Capital Investments
- Establish Permanence
- Public Infrastructure

# Transformation Solutions

- Query Private Sector
- Senior Management Support
- Establish Partnerships
- Make Early Progress
- Use Bounded Analysis
- Obtain Regulator Agreement
- Safety Advocate
- Infrastructure Leases
- Change Control Board
- CROET Reinvestment
- Transfer Buildings and Land
- Transfer Infrastructure



### **Marketable Assets**

**Physical** 

Over 1300 Acres of Land

**Multi-use Buildings** 

Comprehensive Infrastructure

**One-of-a-kind Equipment** 

**Nonphysical** 

Location

Utility, emergency and telecommunication services

**Technology transfer** 

**Trained Workforce** 

Strategic Partnerships



#### Successes to date

- Executed over 90 leases with private business
- Transferred
  - 19 properties (~700 acres)
  - 332,000 square feet of building space
- Leased
  - 300 acres of DOE-owned property
  - 180,000 square feet of DOE-owned building space
- Over 11 miles of railroad and related equipment transferred to CROET, rehabilitated, and sold to private sector









### Successes to date (cont'd)

- CROET
  - Sold 33 acres and 9 buildings to private investors at the Heritage Center and the City
- Oak Ridge Industrial Development Board
  - Assumed ownership of the Horizon Center private industrial park
- City of Oak Ridge
  - Assumed ownership of onsite Fire and Emergency Response Facility
  - Assumed ownership of water & sewer systems









#### **Benefits to Date**

- Cumulative savings to the DOE from avoided operations, maintenance, surveillance, and demolition costs total more than \$45 million to date.
- Capital investment at ETTP as result of reindustrialization is approximately \$100 million.
- Currently, 15 companies are engaged in activities ranging from mixed waste processing to analytical chemistry to manufacturing fuel cells.
- Creating over 1000 private sector jobs



### **Technology Transfer Initiatives**

New Carbon Fiber Manufacturing Pilot Plant

- Joint partnerships with ORNL
  - Metals Processing
    - New start-up business
  - Membrane technology
    - Pall Industry
  - Technology worker training in partnership with Roane State Community College





#### **Conservation Initiatives**

- Black Oak Ridge Conservation Easement (~3,000 acres)
- Parcel ED-1 Natural Areas (~500 acres)
- Greenway Foundation established for non-developable property
- Greenway/Trail System for recreation use



# **Energy Initiatives**

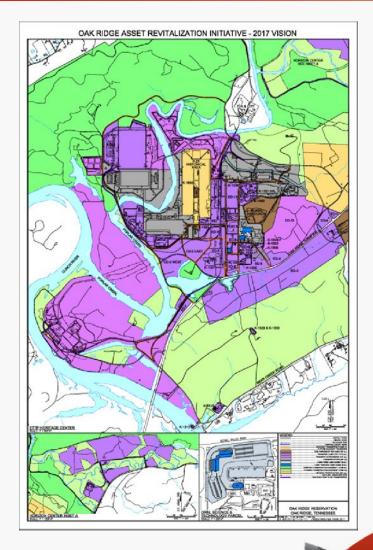
- Switch grass for bio-fuels
- Two private Solar projects under development in Parcels ED-4 and ED-5
- Lessee provides feedstock for biomass reactor at ORNL





#### Our 2017 Vision

- Private industrial use development at ETTP
- Conservation easements
- Historic preservation future Manhattan Project National Park Site
- Expanded Science & Tech.
   Park at Oak Ridge National Lab (ORNL)





Reindustrialization/ARI is effective and critical to reducing costs and enhancing development of Private Sector Business in the region

