

PORTSFUTURE

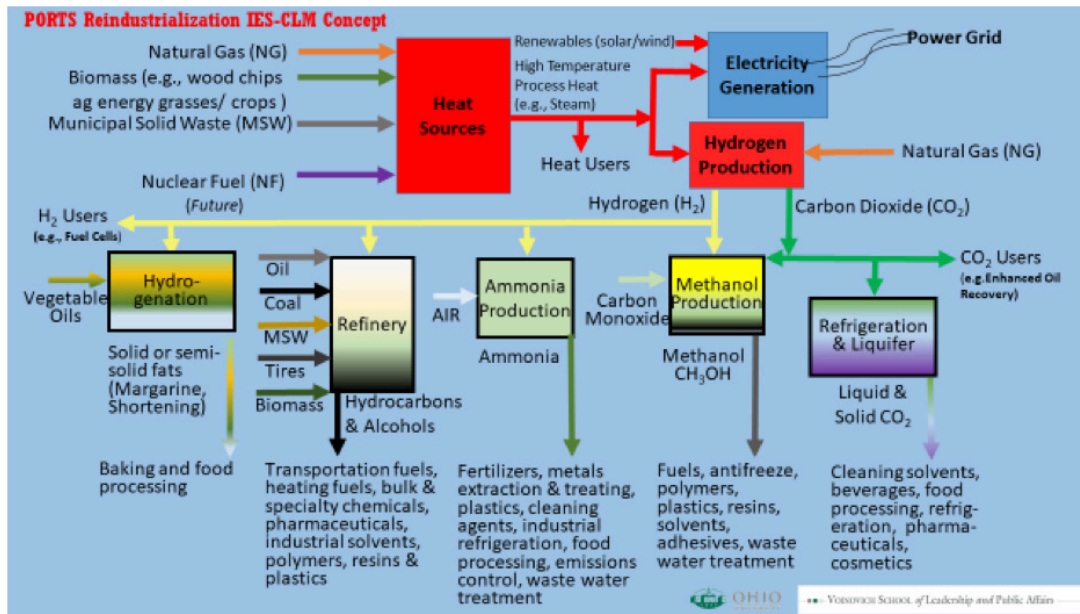
IMAGINING THE OPPORTUNITIES, GATHERING YOUR IDEAS
THE FACILITY AT PIKETON, OHIO



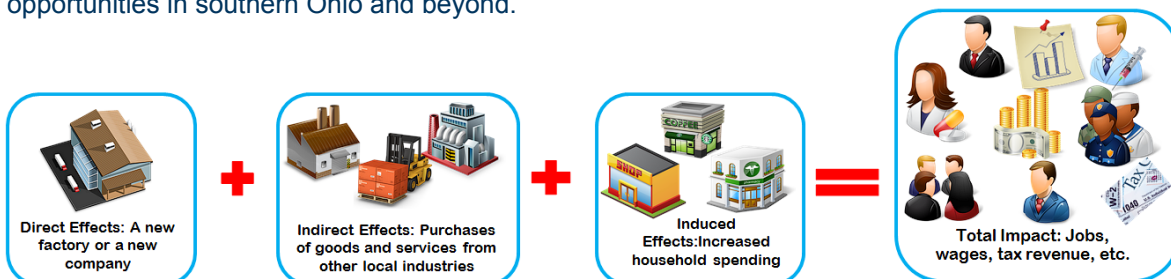
ECONOMIC AND WORKFORCE IMPACT ANALYSIS FOR PROPOSED DATA CENTER AS PART OF AN INTEGRATED ENERGY SYSTEM-CLOSED LOOP MANUFACTURING COMPLEX AT PORTS

Ohio University's PORTSfuture project is supporting the Southern Ohio Diversification Initiative (SODI) efforts to develop an Integrated Energy System-Closed Loop Manufacturing (IES-CLM) complex at the US Department of Energy PORTS reservation in Ohio. An IES-CLM complex will strive to fully leverage the unique infrastructure and other assets of the site for regional economic growth by: attracting and expanding industries in the region; leveraging coal and shale resources in additive manufacturing applications; creating jobs; and growing the southern Ohio economy.

An IES-CLM complex results in: high efficiency; high reliability; low emissions; low/acceptable production costs; creation of more permanent, non-exportable, higher-quality jobs; and embodies a synergistic integration of an "all-of-the-above" energy strategy. Regional cluster development can occur with the growth of spin-offs from the core complex. Various industries can realize more effective production costs when tied into an IES-CLM complex to access heat, electricity, hydrogen, and other production outputs via transportation networks (e.g. roads, rail, waterways, and pipelines).



Developing an IES-CLM complex will further SODI's mission to diversify the regional economy by imagining possibilities beyond the immediate and existing economic realities in southern Ohio and will attract 21st century industries with enduring missions. Site reindustrialization will spur regional cluster and supply chain-related growth throughout the impacted counties and multi-state region, further advancing economic prosperity by growing both large and small business opportunities in southern Ohio and beyond.



The PORTSfuture project is funded by a grant from the US Department of Energy Office of Environmental Management Portsmouth/Paducah Project Office.

DATA CENTER

PROJECT SIMULACRUM: Facebook Data Center in New Albany, OH (970,000 sq. ft.)

PROJECT STUDY AREA: OVRDC region (Adams, Brown, Clermont, Gallia, Highland, Jackson, Lawrence, Pike, Ross, Scioto, and Vinton Counties, Ohio)

IMPLAN OVERVIEW: IMPLAN is an acronym for IMpact analysis for PLANing and is a widely used tool for economic impact analyses. IMPLAN uses a general input-output model that uses secondary data from the BEA, BLS, and Census.

KEY DEFINITIONS: The Multiplier is the ratio of the Total Effect to the Direct Effect. Employment is annual average jobs of full and part-time employees and self-employed people. Labor Income is composed of both the wages and benefits paid to employees, and the profits earned by self-employed people. Value Added (or Gross Regional Product) is the combination of Labor Income plus corporate profits, interest income, rental payments, sales tax, excise tax, property tax, fees, fines, and licenses. Finally, Output is the combination of Value Added plus the materials and services (other than employment) required by an industry to create its products.

DATA CENTER ECONOMIC IMPACT

CONSTRUCTION				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	1,600	\$59,840,001	\$68,413,430	\$80,089,356
Indirect Effect	83	\$4,312,350	\$7,238,291	\$14,756,137
Induced Effect	322	\$11,404,902	\$22,102,275	\$39,125,862
Total Effect	2,005	\$75,557,253	\$97,753,997	\$133,971,355
Multiplier	1.25	1.26	1.43	1.67

OPERATION & MAINTAINANCE				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	100	\$7,733,000	\$8,002,334	\$8,358,095
Indirect Effect	29	\$1,135,934	\$1,885,406	\$3,470,933
Induced Effect	45	\$1,576,646	\$3,055,606	\$5,409,008
Total Effect	174	\$10,445,580	\$12,943,346	\$17,238,036
Multiplier	1.74	1.35	1.62	2.06

DATA CENTER WORKFORCE IMPACT

CONSTRUCTION		
Occupation	Percent of Industry	Employment
Construction And Extraction Occupations	54.1	866
Installation, Maintenance, and Repair Occupations	17.6	282
Office And Administrative Support Occupations	7.3	117
Management occupations	5.9	94
Transportation and material moving occupations	5.4	86
Production Occupations	3.8	61
Business and Financial Operations Occupations	2.4	38
Architecture and Engineering Occupations	1.5	24
Sales And Related Occupations	0.8	13

OPERATION & MAINTAINANCE		
Occupation	Percent of Industry	Employment
Computer and Mathematical Occupations	41.2	41
Office and Administrative Support Occupations	26.5	27
Business and Financial Operations Occupations	10.3	10
Management Occupations	9.5	10
Sales and Related Occupations	7.7	8
Mathematical Science Occupations	0.8	1
Architecture and Engineering Occupations	0.8	1
Installation, Maintenance, and Repair Occupations	0.7	1
Production Occupations	0.5	1

FOOTNOTE:

1. Economic impact analysis conducted with IMPLAN software, version 3.1. IMPLAN is an acronym for IMpact analysis for PLANing and is a widely used tool for economic impact analyses. IMPLAN uses a general input-output model that uses secondary data from the BEA, BLS, and U.S. Census Bureau.

2. Underlying industry, occupation, and employment data are derived using national expected averages from the Bureau of Labor Statistics' Occupational Employment Statistics (OES) survey and 2016–2026 industry-occupation matrix data, by industry tables. Source: <https://www.bls.gov/emp/tables/industry-occupation-matrix-industry.htm>."