Lightcast

Skills Gap Analysis for the Clean Energy Sector

DuPage County, Illinois

Lightcast

232 N Almon St
Moscow, ID 83843

Contents

Cover Letter

Economic Modeling, LLC d/b/a Lightcast is pleased to share our qualifications and interest in partnering with DuPage County to conduct Skills Gap Analysis for the Clean Energy sector.

In 2021, Emsi (founded in 2001) and Burning Glass Technologies (founded in 1999) merged, and in 2022, rebranded as Lightcast. Lightcast is the nation's premier provider of economic and labor market data, skills data, economic modeling, custom analyses, and data-informed talent strategies. We partner with all levels of government entities – especially workforce and economic development organizations, industry associations, education and training institutions, the civic sector, foundations, employers, and others to address skills and workforce needs, inform curriculum development, and connect workers to learning, jobs, and opportunity.

Headquartered in Boston, Massachusetts, and Moscow, Idaho, Lightcast is active in more than 30 countries, with offices in the United Kingdom, Italy, New Zealand, and India. Globally, Lightcast has about 600 employees. Lightcast is backed by global private equity leader KKR. For more, visit www.lightcast.io

Our proprietary data and analytic capabilities will allow for the most comprehensive and up-to-date understanding of skills-based workforce needs and enable DuPage County and its partners to proactively build a pipeline of skilled and future-ready workers for the Clean Energy sector. With deep experience in understanding workforce dynamics of emerging industries and a firm commitment to leveraging data to expand opportunity for all, Lightcast looks forward to lending our data and capabilities to achieve DuPage County's objectives. We thank you for the opportunity to share our interest in and capabilities to support this important work and are happy to answer any questions about our submission.

Thank you,

Monica Heffernan

Firm Qualifications

About Lightcast

Legal Name: Economic Modeling, LLC
Address of Place of Business: 232 N. Almon Street, Moscow, ID 83843
Telephone number: (208)883-3500
Principal Owner of the Respondent: Obsidian BG Holdings LP
TIN: 84-2739605
Address: 232 N. Almon Street, Moscow, ID 83843
Number of Employees: 337

People inspired. Data driven.

Lightcast provides trusted labor market data, analytics, and expert guidance that empowers states, regions, communities, education, businesses, and organizations to make informed decisions and navigate the increasingly complex world of work.

Lightcast is the nation's premier provider of labor market data, economic modeling, and custom analyses, enabling companies, chambers of commerce, communities, institutions, and individuals to make sound investments in skills development, workforce preparation, and industry/education partnerships.

Headquartered in Boston and Moscow, Idaho, Lightcast is active in more than 30 countries and has offices in the United Kingdom, Italy, New Zealand, and India. Lightcast is

backed by global private equity leader KKR. For more information, please visit www.lightcast.io

With over 20 years of experience, our data helps drive strategies that attract jobs, identify up- and reskilling opportunities, support businesses, attract workers, and develop effective policy. Lightcast data helps local residents enjoy greater prosperity and increased economic mobility. Lightcast serves thousands of global clients.

Our one-of-a-kind database combines job posting analytics, workforce profile data, localized traditional labor market information, and skills data to provide the most comprehensive, current, and granular picture of the labor market possible. Our business focuses on:

- Economic Development and Government Entities: Helping communities attract and retain business
- Workforce Development: Unlocking success by connecting workers with jobs
- Education: Preparing students for a fast-changing labor market
- Enterprise & staffing: Helping companies strategically recruit the workers they need

We recently conducted a survey of nearly 1,400 clients using Lightcast analytics to better understand how our clients are creating an impact – not just in their own organizations, regions and workforces, but collectively. Some key metrics from our Impact Study are shown below and more information on Lightcast's impact can be found here.

71%
of community clients report an increase in the number of people from diverse or historically marginalized populations who gain marketable skills that lead to well-paying jobs.

61% attribute Lightcast for becoming more effective at identifying and promoting in-demand skills and career paths.

As all our clients work toward developing a future-ready workforce, they've reported an increase in the number of instances where data-driven insights anticipated future needs or trends in recent years, including:

76%
of community clients report a more nuanced understanding of local labor market conditions and their impact on economic growth and development.

76%
of community respondents report an increase in the number of people gaining marketable skills that lead to well-paying jobs.

77% attribute at least some of the increase to Lightcast.

Leading organizations who trust Lightcast data and analysis include:

Google

United States Federal Reserve System

Department of Labor United States of America

McKinsey&Company

The Great Seal of the State of New York

Microsoft

Linked in

Education Advisory Board

BROOKINGS

Bloomberg

workday

IBM

We work with a variety of **public sector entities** on economic development and work-force development strategies, including:

City of SACRAMENTO

CITY OF CHARLOTTE

CareerSource FLORIDA

Workforce Development Board of Solano County

GOVERNOR'S WORKFORCE CABINET

SAN BERNARDINO COUNTY Workforce Development

CareerSource TAMPA BAY

STANISLAUS COUNTY WORKFORCE DEVELOPMENT

CENTRAL IOWA WORKFORCE DEVELOPMENT BOARD

We are Experts on the Green Labor Market

Our research helps organizations, businesses, and communities prepare their labor market for new opportunities in the green economy. *Click on the cover or title of each to read about our research in the Green Economy and Labor Market.*
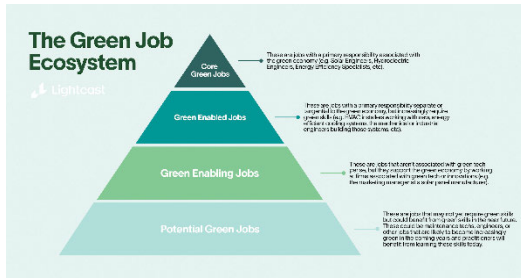
The Green Future of the Labor Market in the US

Green Jobs Now: Illinois, with WorkingNation -

How Green Economies Impact Jobs

The Growth of Green Jobs

A More Holistic and Granular View of the Green Economy

Green and Growing

Project References

Working Nation

Project Type: Green Jobs Landscape Analysis, National and by State
Reference: Joan Lynch, (917) 623-0771, joanlynch@workingnation.com
Lightcast Project Manager: Rachel Sederberg, Senior Consultant
Project Description:
WorkingNation partnered with Lightcast and MISI, an economic and energy research firm specializing in the environment, to study the labor market related to Green Jobs. This project created a taxonomy for the green workforce: Core Green Jobs, Green Enabled Jobs, Green Enabling Jobs, and Potential Green Jobs. The report estimated the demand for green jobs in the present and the projected demand, and it sized the green jobs workforce. Lightcast wrote a national report and ten state-level reports.
More information can be found here.

Detroit Regional Chamber
Project Type: Sector Strategy for the Mobility Sector
Reference: Christi Taylor, (734) 363-9924, ctaylor@detroitchamber.com
Lightcast Project Manager: Ashley Peterson, Senior Consultant
Project Description:
With the Detroit region's rich history in the automotive industry and the skills of those working within it, the region is well-positioned to define the contemporary Mobility sector as it did for the Automotive industry in the last century. The Detroit Regional Chamber retained Lightcast to conduct a thorough analysis of the Mobility sector in the Detroit region to realize a more advanced and cleaner, greener economy. Lightcast provided labor market information and employer demand data and insights to underpin how the region understands this sector and its subsectors (e.g., electric vehicles, autonomous vehicles, etc.), and in turn inform the type, volume, and nature of investments in education, workforce development, work-based learning, and credentialing.
More information can be found here.

City of Charlotte, NC

Project Type: Talent Alignment Strategy
Reference: James Carter, City of Charlotte, James.Carter@charlottenc.gov
Lightcast Project Manager: Susan Koehn, Senior Consultant

Project Description:
The City of Charlotte wanted to understand the current labor market dynamics and projected talent demands for eight key target sectors, including **Clean Energy**, to provide strategic direction for the city's HIRE Charlotte initiative. Lightcast leveraged its innovative data and approaches to perform a skills and training gap analysis to demonstrate the City of Charlotte's current and projected ability to meet the skills-based labor and training demands of the City's target sectors. Lightcast provided actionable insights and a custom strategic opportunities analysis for each target sector, focused on building on-ramps to high-quality jobs, retaining and attracting talent, and postsecondary alignment to employer needs.

City of Sacramento

Project Type: Regional Skills Analysis and Clean Energy Skills Analysis
Reference: Kriztina B. Palone, City of Sacramento, KPalone@cityofsacramento.org
Lightcast Project Manager: Ashley Peterson, Senior Consultant
Project Description:
A core tenet and imperative of the City of Sacramento is to thrive in an ever-developing modern economy, positioning underserved and underrepresented people and communities as leading owners, drivers, and beneficiaries of enormous growth opportunities. The City of Sacramento partnered with Lightcast to close workforce equity gaps through stronger data-based decisions focused on a variety of key sectors – including the **Clean Economy**. The City of Sacramento Regional Skills Analysis provides information on in-demand jobs that present opportunities to aid workforce development efforts, including career pathways for students and residents in the region with little job experience or postsecondary education.

Key Qualifications

Lightcast combines capabilities across a range of disciplines to provide data, analyses, and strategic guidance to those planning comprehensive industry-focused workforce and economic development initiatives. With expertise in data science, economics, workforce development programming, economic development, and data analyses, Lightcast offers a team to not only provide insights, but to ensure that it is delivered in a way that is reliable, digestible, and actionable. **Our project team has the availability and capacity to complete this project within the desired timeframe.**

Dustin Lester, Vice President of Professional Services

Dustin serves as a vice president of professional services for Education & Government at Lightcast. He leads a diverse team of practitioner-experienced consultants and researchers to apply Lightcast data to innovative and measurable solutions for workforce and economic development organizations, government, and industry associations.

Dustin's background in workforce and economic development includes both practitioner and consulting roles. He previously served as manager of business retention & expansion, manager of projects & business development, and led foreign direct investment and request for information (RFI) response work at two regional economic development organizations. Previous to serving as a professional services leader at Lightcast, Dustin led as assistant director of economic development at a national economic and workforce development consulting firm. In addition to professional roles, he has been active in the community previously serving on a workforce development board and as an appointed member of council for a village government. Dustin received his master of public administration from Northern Kentucky University and a bachelor of science in technology from Bowling Green State University.

Matthew Walsh, Director of Research

Matthew specializes in projects related to workforce development, or how to create and connect people to good jobs that support individuals, families, and communities. Matthew embeds equity and job quality considerations into his work with regional development authorities, industry groups, educational institutions, public agencies, policymakers, and employers.

At Lightcast, Matthew has worked on a variety of inclusive development projects: regional initiatives that connect underemployed local workers to critical and high-paying occupations in strategic industries, investigations into local barriers to employment and the social conditions that disadvantage certain workers, and briefs on public policies and changes in employer behavior that would result in increased mobility out of entry-level jobs. Matthew has also worked with stakeholders in education to improve occupational credentialing and to align curricula with trends in job demand.

Prior to working at Lightcast, Matthew was a Fulbright Scholar in Argentina and a Peace Corps Volunteer in the Dominican Republic. His research from the former was published by the aca-demic journal Desarrollo y Sociedad. Matthew earned his bachelor's degree from the University of Chicago.

Ashley Peterson, Senior Consultant & <u>Project Manager</u>

Ashley Peterson is an experienced economic development researcher and project manager. She received her bachelor's degree in Business Management from the University of Wisconsin-La Crosse. Prior to Ashley's role at Lightcast, she served as the Director of Client Services at a national economic development and site selection consulting firm, where she worked with dozens of economic development clients, from rural counties to large regional/state organizations and utility companies, to help their communities prosper and grow.

A researcher at heart, Ashley believes that all successful economic development and workforce strategies should be data-driven and evidence based, and she brings that perspective to every project she leads. Her project experience includes economic development strategic plans; target industry studies and marketing strategies; talent analyses and strategies; competitiveness assessments; and more. She also has experience conducting site selection projects.

Collin Perciballi, Senior Consultant

Collin Perciballi is a seasoned economic development professional with skill as both practitioner and consultant. He has experience in labor market analysis, target industry attraction studies, foreign direct investment (FDI), competitive benchmarking, and site selection. Collin previously served as Project Manager for Conway Data, Inc and Senior Analyst for Investment Consulting Associates. He received an MBA from the

University of Bologna Business School (BBS), an MA in History and Territorial Analysis from the University of Catania, and a BA in Political Science from Auburn University.

Susan Koehn, Senior Consultant

Susan Koehn is a practitioner with 30+ years of experience working at the intersection of economic and workforce development. Prior to joining Lightcast earlier this year, Susan served as Vice President for the Milwaukee7 Regional Economic Partnership and Metropolitan Milwaukee Association of Commerce. There, she worked to improve the capabilities of regional employers to attract, retain and develop talent to fuel growth in Southeast Wisconsin. She designed initiatives to connect employers to workforce resources and build a long-term sustainable talent pipeline in collaboration with K-12 and higher education.

Susan has successfully cultivated strategic partnerships between employers, industry associations, and the education/workforce partners that make up their talent "supply chain" in order to foster skills attainment aligned to industry needs, labor force attachment, business growth, and the economic mobility of citizens. A guiding principle of Susan's career is that we move faster and have greater impact if we collaborate - across organizations, across geography, and across sectors of the economy.

Susan earned a Bachelor's degree in Business Administration from Marquette University in Milwaukee, Wisconsin and a Master's degree from the University of Wisconsin - Madison. A proud Midwesterner, Susan spends as much time as possible enjoying the forests and fresh water of the Great Lakes region, especially Wisconsin's beautiful Door County.

Hunter Hill, Senior Research Analyst

Hunter Hill joined Lightcast as a research analyst in February 2022. She specializes in workforce development projects, and leverages labor market data and analytics to identify pathways to good jobs and economic prosperity for unemployed and underemployed individuals that align with current and projected workforce demand.

Prior to joining Lightcast, Hunter worked as an independent consultant for nonprofit and public sector agencies, and as a research

analyst for Florida State University (FSU) and the Florida Legislature's Office of Program Policy Analysis and Government Accountability. She is currently finishing her PhD in Public Administration and Policy at FSU, where she earned her Master of Public Administration (MPA). Hunter also holds a BS in Political Science and a BA in Philosophy from Southeast Missouri State University.

Chris Compton, Research Analyst

Chris Compton is a research analyst on the Community Consulting team. His work involves utilizing his skills in both economic analysis and quantitative analysis to lead important projects. Specifically, Chris leads labor market research and economic impact studies that benefit a wide range of stakeholders, including regional workforce boards, local and state governments, and certification-granting organizations. Through his work, Chris provides these organizations with valuable insights into their respective labor markets. Before working at Lightcast, Chris analyzed economic data and forecasted trends for private companies and industry associations. More recently, he studied economic digital development at a global scale as an academic researcher.

Chris earned his B.A. in Economics and Mathematics from Bentley University, where he first gained his heightened interest in labor market analysis through his studies of monetary policy. He was named the top economics major in his class by the economics department.

Project Understanding and Approach

Background

The State of Illinois has ambitious goals around reducing carbon emissions and in 2021, passed the Clean Energy Jobs Act (CEJA) to help develop a statewide workforce equipped to facilitate this transition. DuPage County, part of the Chicago MSA, is looking to understand its role in this transition and identify areas for growth and development in the Clean Energy sector. This starts with a solid understanding of the current state of the Clean Energy sector in the County, as well as an assessment of the future needs of the sector. This will allow DuPage County to understand any gaps or challenges to meeting the future workforce needs of the sector and work to mitigate those challenges. Lightcast's approach to this project is outlined on the following pages of this proposal.

A Note on Lightcast's Job Postings Data and Green Jobs Tagging

Lightcast has developed a comprehensive database of online job postings, which can be queried to reveal trends in the Clean Energy sector related to in-demand skills, credentials, and occupations. Lightcast's spidering technology extracts information from more than 50,000 online job boards, newspapers, and employer sites on a daily basis and de-duplicates postings for the same job, whether it is posted multiple times on the same site or across multiple sites. Lightcast extracts employer name, job title, requested degrees and certifications, and skills referenced in job postings, among other information. Lightcast then maps extracted information to standardized taxonomies for industry (NAICS), occupation (SOC), and educational programs (CIP).

Lightcast collaborated with Working Nation to understand the breadth of green jobs across the country. This work resulted in a series of reports viewing the national landscape for green jobs, as well as in individual states (including Illinois): Green Jobs Now. Through this work, Lightcast tagged job postings within the green jobs space. By tagging green jobs, communities and researchers can explore the demand for Green

Jobs in their own region, or within specific industries. Historic postings have been tagged, enabling a look at how the sectors have changed over the years. Green jobs have been split into three categories: Core Green jobs; Green Enabling jobs; and Green Enabled jobs. This universe of job postings will be leveraged for the analysis outlined below.

Lightcast Approach

Step 1: Scoping Demand for Green Jobs

Lightcast will first assess the composition of the green economy using Lightcast's proprietary green jobs taxonomy, described above but reiterated here: **Core Green jobs** are primarily focused in the green economy; **Green Enabling jobs** work at green firms but may not work directly in green tech; and **Green Enabled jobs** require green skills. Lightcast will size the market demand for these green jobs.

Lightcast will then work closely with the DuPage County team to accurately scope the six Green Jobs sectors identified by the Illinois Department of Commerce & Economic Opportunity:

- Solar & Wind
- Automotive (EV focus)
- Electrical
- Green building construction
- Building Maintenance
- Manufacturing clean energy technologies

Lightcast proposes a combined approach to accurately scope these sectors:

- Traditional Labor Market Supply Data - The traditional labor market supply-side data comes from government sources, such as the Census, Bureau of Labor Statistics (BLS), etc. Lightcast will define the sectors using a set of North American Industry Classification System (NAICS) codes and Standard Occupational Classification (SOC) codes.
- Employer Demand Data – While NAICS and SOC codes can also be leveraged to define the sectors within Lightcast's universe of job postings, we have additional flexibility in the job posting dataset to define a more targeted scope for the demand analysis

using employer names and keyword searches. This flexibility will be particularly important for the green jobs sector, as the relevant jobs are most appropriately classified according to the skills, tasks, and technologies employed in the roles.

The result of the Step 1 analyses will be to adequately size the green economy labor market in DuPage County.

Step 2: Exploring the Sectoral Landscape for Clean Energy

Lightcast will analyze the current state of the Clean Energy sector in DuPage County.

Where applicable, we will benchmark DuPage County to the MSA and state to provide context and identify differences.

Lightcast will calculate the following metrics for the green sector overall; green jobs disaggregated according to the Lightcast taxonomy of core, enabling, and enabled green jobs; and for the six sectoral clusters identified by the Illinois Department of Commerce & Economic Opportunity:

- Current supply of workers
- Past and projected job growth
- Location quotient (sector concentration)
- Demographics for the occupations most concentrated in the green economy
- Top employers exhibiting demand for green jobs
- A list of Clean Energy companies in DuPage County and their associated subsectors

The result of the Step 2 analyses will be an identification of 2-3 clean energy-related industry sectors/subsectors that align with the County's strengths and will provide the greatest economic opportunity for DuPage County moving forward.

Step 3: Occupation Deep Dives for Clean Energy Jobs

Lightcast will leverage its Green Jobs tagging in job postings to better understand employers needs and any occupation/skill gaps for the Clean Energy sector and for each target subsector. This will include:

- Historical and current job posting trends
- Top occupations by demand and their associated education/experience requirements, wages, demand growth, etc.
- Top skills in-demand and emerging skills, including 2-year skill projections
- Top credentials, certifications and education programs requested

From this analysis and in partnership with DuPage County, we will identify 3-5 clean energy-related occupations within the identified sectors that may provide the most opportunity for DuPage County residents and businesses.

Step 4: Connecting Workforce Strategies to Target Roles

For the target clean energy occupations, Lightcast will provide an occupational profile that highlights:

- Demand trends
- Wage trends
- Typical education and experience requirements
- Top current and emerging skills
- Top credentials and degrees in-demand
- Top education programs (4-digit CIP codes) that align with each occupation and an analysis of the number of regional completions from those programs

This analysis will identify any gaps or barriers to filling these key roles. Lightcast will then recommend workforce development strategies for each. This may include short-term occupational training programs, work-based learning, apprenticeships, stackable credentials, etc.

Deliverables

The resulting project deliverable will be a written report summarizing data from each step of the research, as well as key findings and recommendations to support workforce development initiatives in the Clean Energy sector.

Project Management

The timeline for the scope of work described above is 12 to 14 weeks. The Gantt chart below shows the sequencing of project steps. This timeline assumes timely input and communication from the client and stakeholders involved in the process. The timeline can be modified slightly to accommodate schedules, important meeting dates, etc.

	Weeks											
	1	2	3	4	5	6	7	8	9	10	11	12
Project Kickoff	■											
Step 1: Current Landscape for Clean Energy	■	■	■	■								
Step 2: Current and Future Demand for Clean Energy Sectors				■	■	■	■	■				
Step 3: Workforce Strategies							■	■	■	■		
Final Reporting and Presentation										■	■	■

(PLEASE TYPE OR PRINT THE FOLLOWING INFORMATION)

Full Name of Offeror	Lightcast
Main Business Address	232 N. Almon Street
City, State, Zip Code	Moscow, Idaho 83843
Telephone Number	206-948-6058
Fax Number	
Proposal Contact Person	Monica Heffernan
Email Address	monica.heffernan@lightcast.io

The undersigned certifies that he is:

☐ the Owner/Sole Proprietor   ☐ a Member of the Partnership   ☑ an Officer of the Corporation   ☐ a Member of the Joint Venture

herein after called the Offeror and that the members of the Partnership or Officers of the Corporation are as follows:

Chris Kibarian
_____
(President or Partner)

_____
(Vice-President or Partner)

_____
(Secretary or Partner)

_____
(Treasurer or Partner)

Further, the undersigned declares that the only person or parties interested in this Proposal as principals are those named herein; that this Proposal is made without collusion with any other person, firm or corporation; that he has fully examined the proposed forms of agreement and the contract specifications for the above designated purchase, all of which are on file in the office of the Procurement Manager, DuPage Center, 421 North County Farm Road, Wheaton, Illinois 60187, and all other documents referred to or mentioned in the contract documents, specifications and attached exhibits, including Addenda No. _____, _____, and _____ issued thereto;

Further, the undersigned proposes and agrees, if this Proposal is accepted, to provide all necessary machinery, tools, apparatus and other means of construction, including transportation services necessary to furnish all the materials and equipment specified or referred to in the contract documents in the manner and time therein prescribed.
Further, the undersigned certifies and warrants that he is duly authorized to execute this certification/affidavit on behalf of the Offeror and in accordance with the Partnership Agreement or by-laws of the Corporation, and the laws of the State of Illinois and that this Certification is binding upon the Offeror and is true and accurate.

Further, the undersigned certifies that the Offeror is not barred from proposing on this contract as a result of a violation of either 720 Illinois Compiled Statutes 5/33 E-3 or 5/33E-4, proposal rigging or proposal-rotating or as a result of a violation of 820 ILCS 130/1 et seq., the Illinois Prevailing Wage Act.

The undersigned certifies that he has examined and carefully prepared this proposal and has checked the same in detail before submitting this proposal, and that the statements contained herein are true and correct.

If a Corporation, the undersigned further certifies that the recitals and resolutions attached hereto and made a part hereof were properly adopted by the Board of Directors of the Corporation at a meeting of said Board of Directors duly called and held and have not been repealed, nor modified and that the same remain in full force and effect. (Offeror may be requested to provide a copy of the corporate resolution granting the individual executing the contract documents authority to do so.) Further, the offeror certifies that he has provided services comparable to the items specified in this contract to the parties

listed in the reference section below and authorizes the County to verify references of business and credit at its option.

Finally, the offeror, if awarded the contract, agrees to do all other things required by the contract documents, and that he will take in full payment therefore the sums set forth in the cost schedule.

PROPOSAL AWARD CRITERIA
This proposal will be awarded to the most responsive, responsible vendor meeting specifications based upon the highest score compiled during evaluation of the proposals outlined in the selection process.

The Contractor agrees to provide the service described above and in the contract specifications under the conditions outlined in attached documents for the amount stated.

X ██████████████   Associate General Counsel
(Signature and Title)

CORPORATE SEAL
(If available)

PROPOSAL MUST BE SIGNED FOR CONSIDERATION

██████████████████████████   May _____ AD, 2024

My Commission Expires: _____ 2/10/2030_____
(Notary Public)