



Center of Visual Expertise



## DTE ENERGY CASE STUDY

# A Diversified Energy Company

### Visual Literacy for a Dynamic Work Environment

COVE: Center of Visual Expertise is excited to have partnered with DTE Energy, based in Detroit, Michigan, to deploy Visual Literacy training to workers across the organization. Often thought to primarily apply to more static risk environments, Visual Literacy is also relevant to dynamic risk environments, such as in the energy sector, where situational awareness is so vitally important. Seeing the Whole PICTURE® matters whether we are examining a natural gas electric power generation process or repairing a downed power line from an ice storm. What we see, what it means, and what we do as a result can ensure a safe day for everyone involved.

### DTE and COVE History

DTE developed interest in COVE and Visual Literacy through exposure to Visual Literacy concepts during Campbell Institute Center of EHS Excellence events. Lead by Chris Seluwski, Director of Corporate Safety and Tony Battle, Manager of Learning and Technical Development, a leadership group including the executive sponsor of the DTE Safety Committee visited with the COVE team at the Toledo Museum of Art for



**DTE Energy**

### ABOUT DTE ENERGY

DTE Energy is a Detroit-based diversified energy company involved in the development and management of energy-related businesses and services in the United States and Canada. The DTE Energy portfolio includes non-utility energy businesses focused on power and industrial projects, natural gas pipelines, gathering and storage, and energy marketing and trading.



DTE Energy has more than 10,000 employees in utility and non-utility subsidiaries involved in a wide range of energy-related businesses.

a Visual Literacy overview. Intrigued by the concepts and their relevance to the daily activities within DTE, members of the leadership team and representatives from the operating businesses attended deeper training through COVE's Foundations of Visual Literacy Workshop to better understand the tools and techniques and their application to the work environment.

Following this training, the DTE team determined they would integrate Visual Literacy tools as part of their safety program training, and in particular their work in hazard recognition and pre-job briefs.

### **Deployment Approach with Visual Literacy**

DTE's primary training approach with Visual Literacy focused on training individuals who would serve as trainers, comprising both union leadership and management leadership teaching side by side. Leaders were trained on the tools and techniques of Visual Literacy. The content represented an integration of safety program elements such as hazard recognition and pre-job safety briefs. DTE and COVE worked together to provide training to the trainers at the Toledo Museum of Art, with content beginning with Visual Literacy and concluding with DTE safety program training. Trainers left with the ability to integrate Visual Literacy training with DTE safety program training and deploy on a scheduled basis across DTE operating units.

Integration continued with the introduction to Visual Literacy in DTE's new hire two-day training course to provide an early introduction to Visual Literacy. The DTE view is that Visual Literacy is not a stand-alone program, but rather an additional toolset that can be applied broadly to safety processes like pre-job briefs, hazard recognition, incident investigation, observation processes, and much more. The key is building Visual Literacy into existing or refreshed programs to improve performance.

### **Energy Sector Safety**

The energy sector represents some of the most complex and highest risk work among all industries. Activities range from the maintaining and operating of power generating facilities to the transmission and distribution of electricity and natural gas to businesses and homes. Working environments include not only factory-type environments, but outside construction and maintenance activities as well. Conditions may change multiple times during a high voltage line repair or a gas line rupture and are further complicated by the location of where the work is conducted. This can range from remote areas across the country to busy city streets and residential neighborhoods.

In all cases, close attention to the details of the work and successfully managing the control and mitigation of hazards is critical to safe task completion. OSHA reports that the most important hazards associated with the electric power industry are:

- Electrocutation
- Falls
- Confined Spaces
- Fires and Explosions
- Sprains, Strains and Fractures
- Environmental Stress

The growth in renewable energy has reduced risk in some areas of carbon-based energy generation, primarily in areas such as drilling operations and mining. Renewables have also presented challenges in the areas of working at heights and handling of materials. Despite the method of energy generation, transmission and distribution, risk remains in workers interacting with hazards in varied environments and conditions requiring close attention to details in order to avoid incidents from occurring.

## Visual Literacy at Work in the Field

In one of our coal plants, we have an area that's under our precipitation poppers. We took a still photo of that area and applied the different Visual Literacy tools, Seeing the Whole PICTURE® and Elements of Art, and as a result identified a vac line that was right in the middle of a walkway but at a weird angle. It had had been there all along but no one had ever noticed it. By applying the different concepts and tools that we learned in the Foundations of Visual Literacy workshop, we were able to now see it and pick up on that hazard.

- Chris Seluwski, DTE Energy,  
Director of Corporate Safety

## Outcomes to Date

COVID-19 has presented challenges to DTE as it has to industry and the world. This has been especially challenging for organizations composed of essential workers and providing critical services to their stakeholders. Despite these challenges, DTE has maintained an exceptional safety performance. Over 5,000 DTE employees have been trained in Visual Literacy and surveys conducted by DTE have found overwhelmingly that workers believe Visual Literacy enhances their ability to identify hazards. Over 50% of employees report applying Visual Literacy techniques in pre-job briefs.

## Next Steps

As with any effort in continuous improvement and the introduction of new tools and techniques, the journey for DTE continues. Additional training of field personnel remains on the agenda as does advanced training for Safety Excellence Team members from the business units. Among other responsibilities, team members coach workers in safe worker observations. The positive feedback received from the frontline provides continued support for the contribution that Visual Literacy can make to improving safety processes and performance.



Center of Visual Expertise

Find out more about this leading edge and innovative approach. Contact our team, schedule an overview or read more at:

 (+1) 567-343-1405  [covectr.com](http://covectr.com)

## About COVE: Center of Visual Expertise from the Toledo Museum of Art

COVE has developed a rigorous approach to helping people at Seeing the Whole PICTURE®. This methodology comes from years of study and teaching in the world of art. While the connection between the art world and industry may not be immediately obvious, we have developed a deep understanding of the application of Visual Literacy to safety through our partnership with the Campbell Institute at the National Safety Council and our industry partners, including Owens Corning, Cummins, United Rentals, and others.