



# Generation Technology Assessments

An effective energy transition is a balancing act. With the right generation mix you can reduce emissions while still assuring reliability, safety, and affordable power. Black & Veatch's power generation technology assessments provide an informative analysis of each generation technology's performance capabilities, so you can create the ideal portfolio based on your requirements and move your energy transition forward in the right direction.

## Understand the Complete Generation Landscape

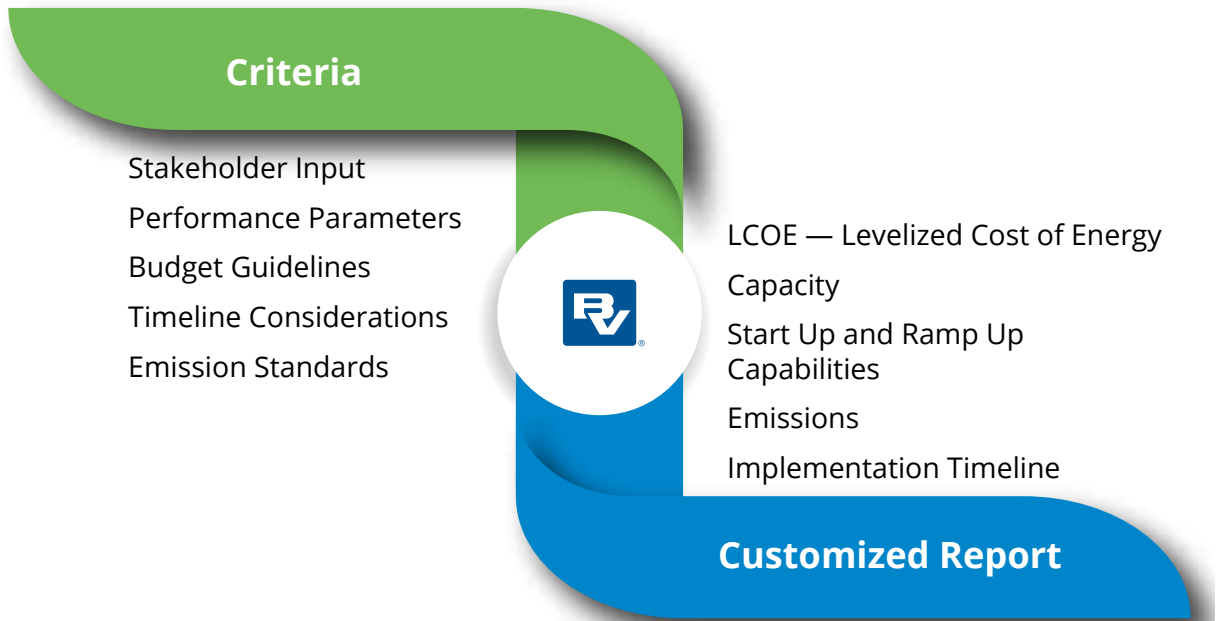
Whether you need a long-term replacement for coal, or a fast, flexible option to supplement existing renewable assets, our technical specialists have it covered. This team's extensive experience planning, developing, designing, implementing, and operating all generation types will provide the cost, vendor, and technical insight needed to effectively evaluate and guide your investment and implementation planning.

- Simple-cycle combustion turbine
- Reciprocating internal combustion engine
- Solar and wind generation
- Battery Energy Storage Systems (BESS)
- Hydrogen and other low carbon fuels
- Combined heat and power
- Combined-cycle combustion turbine
- Nuclear Small Modular Reactors (SMRs)
- Other advanced energy storage and power cycles

## Determine the Best Technology Option to Maximize Returns

Considering your top priorities, we work with you to evaluate your goals and objectives to build a matrix for easy evaluation and comparison of the preferred technologies. After the criteria have been identified, we use proprietary software to formulate the Levelized Cost of Energy (LCOE) based on fuel, maintenance, operations, capital and construction costs to understand how

the cost, performance, and efficiency of each unit affect the lifetime costs of the facility. We can go beyond LCOE and review additional priorities such as including capacity limits, emissions considerations, redundancy or black start requirements, fuel flexibility, reliability, commercial operation date, or ability to start, ramp and stop multiple times daily.



## Accelerate Your Energy Transition

As a leader in power generation, we can continue on to support your energy transition by developing the technology implementation roadmap and installing the solution. Once a technology is selected, our experienced program managers apply leading renewable, gas, hydrogen, and nuclear design and build experience to strategize, budget, schedule, and safely execute the solution. Our engineering and construction resources can also decommission and demolish aging generation

assets. We can help you move from conceptual to permitting and on to procurement, detailed design and construction of the technology – delivering seamless coordination and an efficient generation installation and grid integration.

Get started with the right solution and contact us today about performing a generation technology assessment.

[Get started now.](#)