# North America Organic Rankine Cycle (ORC) Waste Heat to Power Market:"size,share,trends

The role of organic rankine cycle (ORC) waste heat to power convert the thermal heat of liquids or gases to produce carbon-neutral power efficiently. Heat is generated from geothermal sources or industrial or commercial waste heat. The organic rankine cycle (ORC) waste heat to power help companies to produce more electricity to meet the increasing demand. The rising adoption of organic rankine cycle (ORC) technology reduces fuel used for power generation, and various large-scale companies use these technologies to generate power from waste heat recovery.

Data Bridge Market Research analyses that the North America organic rankine cycle (ORC) waste heat to power market is expected to reach the **value of USD 1,379,245.87 thousand by 2029, at a CAGR of 9.2% during the forecast period.** The organic rankine cycle (ORC) waste heat to power market report also comprehensively covers pricing analysis, patent analysis, and technological advancements.

**To Understand Business Strategies, Get a Sample Copy By Clicking Here:** https://www.databridgemarketresearch.com/request-a-sample/?dbmr=north-america-organic-rankine-cycle-orc-waste-heat-to-power-market

**Market Definition**

Organic rankine cycle (ORC) systems are used for power production from low to medium-temperature heat sources at 80 to 350 °C and for small-medium applications at any temperature. This technology allows for the exploitation of low-grade heat that otherwise would be wasted. The working principle of an organic rankine cycle power plant is similar to the most widely used process for power generation, the clausius-rankine cycle.

The main difference is using organic substances instead of water (steam) as a working fluid. The organic working fluid has a lower boiling point and a higher vapor pressure than water and is, therefore, able to use low-temperature heat sources to produce electricity. The organic fluid is chosen to best fit the heat source according to their differing thermodynamic properties, thus obtaining higher efficiencies of both cycle and expander.

**North America Organic Rankine Cycle (ORC) Waste Heat to Power Market Share Analysis**

North America organic rankine cycle (ORC) waste heat to power market competitive landscape provides details by the competitor. Details included are company overview, company financials, revenue generated, market potential, investment in research and

development, new market initiatives, North America presence, production sites and facilities, production capacities, company strengths and weaknesses, product launch, product width and breadth, application dominance. The above data points provided are only related to the companies' focus related to the organic rankine cycle (ORC) waste heat to the power market.
Some of the **major players operating in the North America organic rankine cycle (ORC) waste heat to power market are** MITSUBISHI HEAVY INDUSTRIES, LTD., Kaishan USA, Strebl Energy Pte Ltd, ORCAN ENERGY AG, ALFA LAVAL, Fujian Snowman Co., Ltd., Ormat, Rank, TMEIC, Triogen, ABB, Siemens Energy (Siemens AG), Dürr Group, ElectraTherm Inc. (BITZER Group), Enerbasque, Enertime, Enogia, EXERGY, CLIMEON, INTEC Engineering GmbH, Zuccato Energia srl., Opel Energy Systems Pvt. Ltd., Corycos Group, CTMI - Steam Turbines, BorgWarner Inc.

**Opportunities**

- **Rapid industrialization and climate change concerns**

Industrialization is a process of adopting an economy based on manufacturing. This step involves many changes that help the society's economy grow and prosper. Industrialization does not seem to have a sudden change, but it takes a gradual change that happens over a period. Thus, indirectly there will be a large number of fossil fuels, which in turn generate the climate.

The cause of climate change has been a serious issue that has been changing with the rapid increase in industrialization. However, industrialization is the route to economic development, but climate change is one of the major concerns that must be controlled. This will lead to adopting sustainable and efficient technologies in the industrial process, including the WHP system. The adoption of such technologies with the increase in industrialization along with the climate change concerns will help to protect the environment.

**North America Organic Rankine Cycle (ORC) Waste Heat to Power Market Dynamics**

This section deals with understanding the market drivers, advantages, opportunities, restraints, and challenges. All of this is discussed in detail as below:

**Drivers**

- **Upsurge in the reduction of usage of primary energy in industrial operations**

Waste heat to power is one of the adoptable renewable sources to generate electricity. This technique is found to be the most efficient resource to generate power as it helps to reduce the usage of energy or fuels for industrial processes, and the waste heat generated is used to generate emission-free electricity, which is further used in the normal industrial process or sold to the grid for distribution.

The waste heat generated is considered a by-product in most industries, such as steel paper manufacturing, refineries, chemical, and general manufacturing, as the waste heat is produced

in industrial operations. Thus, the energy or the cost involved in running the main industrial operation will also generate waste heat that can be dumped into the environment.

- **Increased focus on improving the power plant efficiency**

The world's electricity generation is majorly dependent on the fossil fuel resources such as coal, natural gas, and oil. The number of installed fossil-fired power generation plants has increased in North America, and the development of such power plants is trending across the globe. However, waste heat is discharged in a power plant and can be dumped in the environment. How recovering the waste heat is the main approach to improve thermal efficiencies further and reduce greenhouse gas emissions for fossil-fired power plants. Moreover, it is found that adopting technologies to recover waste heat is gaining importance to improve power plant efficiency. Thus, a waste heat ORC system is applied, based on a closed loop thermodynamic cycle for generating electricity and thermal power, which is suitable for plant operations. This system has been found to support various power plant functions such as economizer, heat pump, rotary heat exchanger, regenerator, and many others. This will support the functioning of the power plant and improves its efficiency.

**Read full Report Description with Table of Content and Figure @** https://www.databridgemarketresearch.com/reports/north-america-organic-rankine-cycle-orc-waste-heat-to-power-market

**North America Organic Rankine Cycle (ORC) Waste Heat to Power Market Scope**

North America organic rankine cycle (ORC) waste heat to power market is segmented on the basis of size, capacity, model, and application. The growth amongst these segments will help you analyze meagre growth segments in the industries and provide the users with a valuable market overview and market insights to help them make strategic decisions for identifying core market applications.

**Size**

- Small
- Medium
- Large

On the basis of size, the North America organic rankine cycle (ORC) waste heat to power market is segmented into small, medium, and large.

**Capacity**

- Less Than 1000 kW
- 1001-4000 kW
- 4001-7000 kW
- More than 7000 kW

On the basis of capacity, the North America organic rankine cycle (ORC) waste heat to power market has been segmented into less than 1000 kW, 1001-4000 kW, 4001-7000 kW, and more than 7000 kW.

**Model**

- Steady-State
- Dynamic

On the basis of the model, the North America organic rankine cycle (ORC) waste heat to power market has been segmented into steady-state and dynamic.

**Application**

- ICE or Gas Turbine
- Waste to Energy
- Metal Production
- Cement and Lime Industry
- Glass Industry
- Petroleum Refining
- Chemical Industry
- Landfill ICE
- Others

On the basis of application, the North America organic rankine cycle (ORC) waste heat to power market is segmented into ICE or gas turbine, waste to energy, metal production, cement and lime industry, glass industry, petroleum refining, chemical industry, landfill ICE, and others.

**Buy This Premium Report:** https://www.databridgemarketresearch.com/checkout/buy/enterprise/north-america-organic-rankine-cycle-orc-waste-heat-to-power-market

**North America Organic Rankine Cycle (ORC) Waste Heat to Power Market Regional Analysis/Insights**

North America organic rankine cycle (ORC) waste heat to power market is analyzed, and market size insights and trends are provided by country, size, capacity, model, and application as referenced above.

The countries covered in the organic rankine cycle (ORC) waste heat to power market report are the U.S., Canada, and Mexico.

**U.S. dominates the organic rankine cycle (ORC) waste heat to power market** owing to the rise in importance of generating power from waste heat recovery.

The country section of the report also provides individual market-impacting factors and changes in market regulation that impact the current and future trends of the market. Data points like downstream and upstream value chain analysis, technical trends, and porter's five

forces analysis, case studies are some of the pointers used to forecast the market scenario for individual countries. Also, the presence and availability of North America brands and their challenges faced due to large or scarce competition from local and domestic brands, the impact of domestic tariffs, and trade routes are considered while providing forecast analysis of the country data.

**Key questions answered in the report:**

- What will the market development pace of North America Organic Rankine Cycle (ORC) Waste Heat to Power market?
- What are the key factors driving the Global North America Organic Rankine Cycle (ORC) Waste Heat to Power market?
- Who are the key manufacturers in market space?
- What are the market openings, market hazard and market outline of the market?
- What are sales, revenue, and price analysis of top manufacturers of North America Organic Rankine Cycle (ORC) Waste Heat to Power market?
- Who are the distributors, traders, and dealers of North America Organic Rankine Cycle (ORC) Waste Heat to Power market?
- What are the North America Organic Rankine Cycle (ORC) Waste Heat to Power market opportunities and threats faced by the vendors in the Global North America Organic Rankine Cycle (ORC) Waste Heat to Power industries?
- What are deals, income, and value examination by types and utilizations of the market?
- What are deals, income, and value examination by areas of enterprises?

**Get an Inquire Before Buying@** https://www.databridgemarketresearch.com/inquire-before-buying/?dbmr=north-america-organic-rankine-cycle-orc-waste-heat-to-power-market

**Explore More Reports@**

**Global Hindered Amine Light Stabilizers (HALS) Market**
**https://www.databridgemarketresearch.com/reports/global-hindered-amine-light-stabilizers-hals-market**

**Global Hot-dip Galvanized Steel Products Market**
**https://www.databridgemarketresearch.com/reports/global-hot-dip-galvanized-steel-products-market**

**Global Household Cleaning Tools and Supplies Market**
**https://www.databridgemarketresearch.com/reports/global-household-cleaning-tools-and-supplies-market**

**Global Hydrazine Hydrate Market**
**https://www.databridgemarketresearch.com/reports/global-hydrazine-hydrate-market**

**Global Hydroponics System Market**
**https://www.databridgemarketresearch.com/reports/global-hydroponics-system-market**

**Global Iced Tea Market** **https://www.databridgemarketresearch.com/reports/global-iced-tea-market**

**Global Industrial Cooling System Market**
**https://www.databridgemarketresearch.com/reports/global-industrial-cooling-system-market**

**Global Industrial Pails Market**
**https://www.databridgemarketresearch.com/reports/global-industrial-pails-market**

**About Data Bridge Market Research (DBMR):**

Data Bridge Market Research Pvt Ltd is a multinational management **consulting** firm with offices in India and Canada. As an innovative and neoteric market analysis and advisory company with unmatched durability level and advanced approaches. We are committed to uncover the best consumer prospects and to foster useful knowledge for your company to succeed in the market.

Data Bridge Market Research is a result of sheer wisdom and practice that was conceived and built-in Pune in the year 2015. The company came into existence from the healthcare department with far fewer employees intending to cover the whole market while providing the best class analysis. Later, the company widened its departments, as well as expands their reach by opening a new office in Gurugram location in the year 2018, where a team of highly qualified personnel joins hands for the growth of the company. “Even in the tough times of COVID-19 where the Virus slowed down everything around the world, the dedicated Team of Data Bridge Market Research worked round the clock to provide quality and support to our client base, which also tells about the excellence in our sleeve.”

Data Bridge Market Research has over 500 analysts working in different industries. We have catered more than 40% of the fortune 500 companies globally and have a network of more than 5000+ clientele around the globe.

**Contact Us**

US: +1 888 387 2818
UK: +44 208 089 1725
Hong Kong: +852 8192 7475
**Email –** corporatesales@databridgemarketresearch.com