

# eVinci™ micro reactor

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# eVinci Micro Reactor

## Market Entry: Remote Industrial Applications



### Remote Industrial Needs:

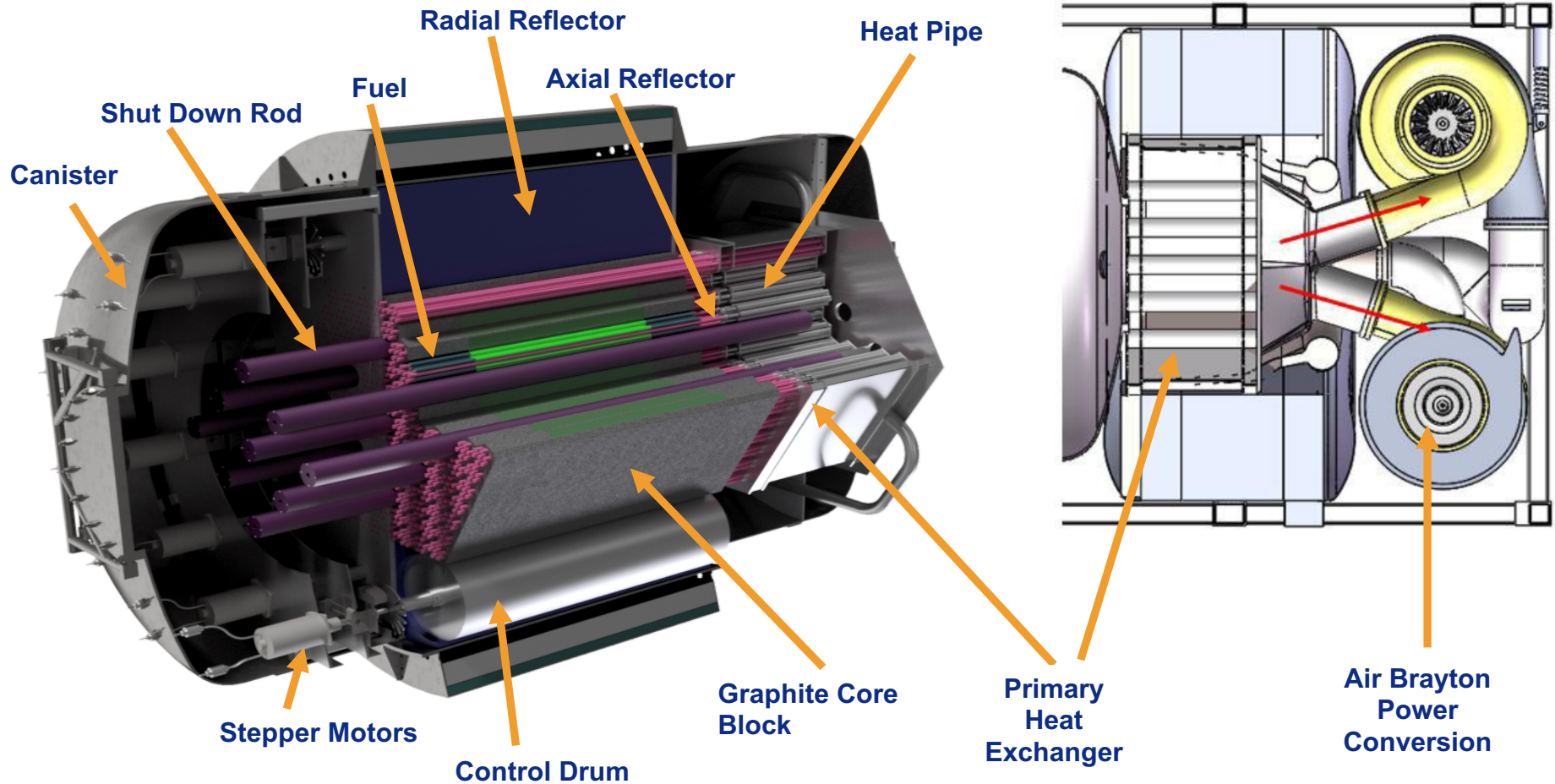
- Eliminate diesel fuel logistics
- Improve environmental management
- Avoid carbon taxes
- Achieve GHG emission goals



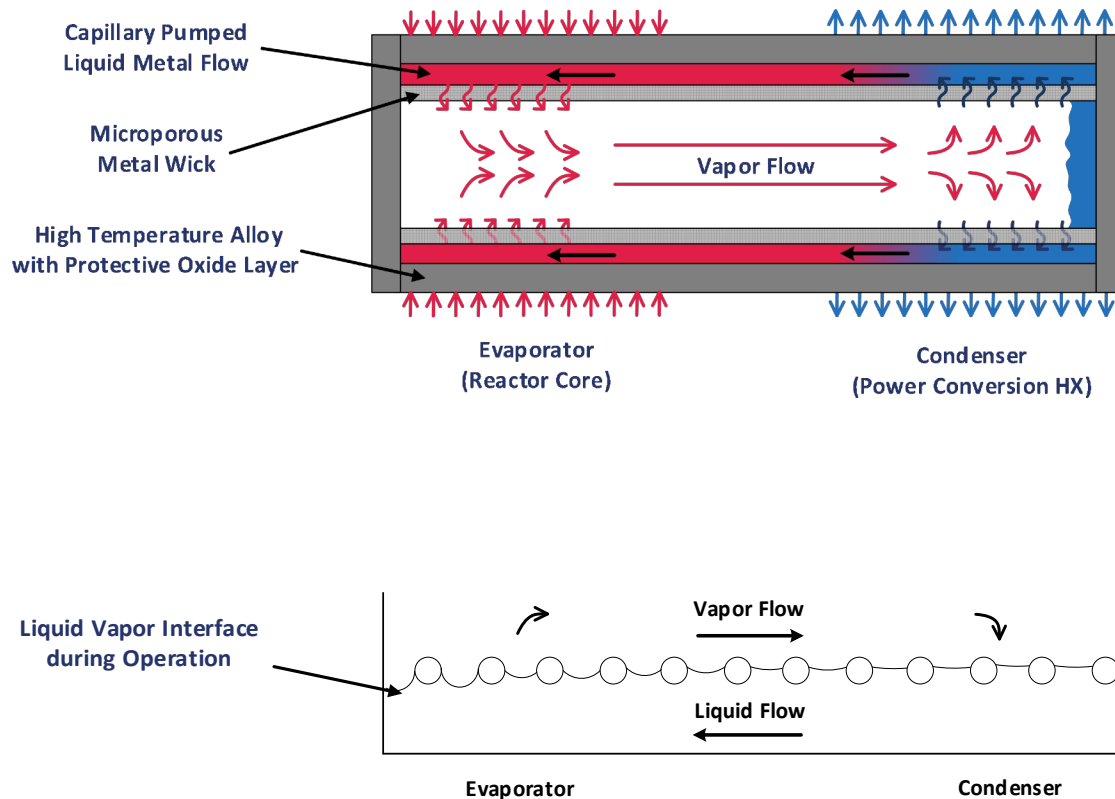
## Attributes

- Transportable for flexible deployment
- Cost-competitive plant lifecycle
- 4.5 MWe -net power output
- Minimum three-year refueling cycle and elimination of need for onsite storage of spent fuel or radioactive waste
- Minimal onsite operations & maintenance personnel
- Mature technology, manufacturing, and regulatory readiness
- Capability to utilize combined heat and power
- Simplicity & reliability for dynamic load operation

# eVinci Technology



# eVinci micro reactor Heat Pipe technology



## Key Advantages

- Passive primary coolant system with built in redundancy
  - **No forced flow** like HTGR and pumped liquid metal reactors
- Heat transfer **via liquid metal phase change**
  - Minimize thermal stress with superior temperature uniformity
  - Minimize fuel temperature following a postulated accident
- Keeps **contaminants associated with open flow systems out of the core**
- Enables **open-air Brayton cycle** for secondary power conversion

# eVinci Markets



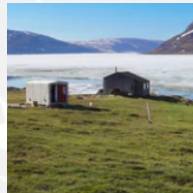
Remote mining operations



Industrial process heat



District heating



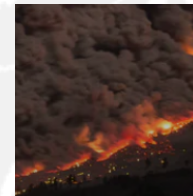
Remote communities



Extreme resilience



Critical Infrastructure Installations



Disaster relief

2020

2021

2025

2026

Electrical Demonstration

Nuclear Demonstration / Prototype

Commercial Units

# eVinci Micro Reactor in a Micro-Grid

