| **User Story ID** | **User Role** | **Need** | **Value** | **Acceptance Criteria** |
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| US001 | Homeowner | Reduce energy costs | Lower utility bills, eco-friendly solution | - Homeowner can schedule hot water usage times through the system interface. <br>- System automatically adjusts heating based on weather forecasts. |
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| US002 | Commercial entity | Meet sustainability goals | Environmental stewardship, cost savings | - System provides real-time data on energy savings compared to traditional heating methods. |
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| US003 | HVAC technician | Simplify installation process | Time-saving, ease of use for professionals | - Installation manual includes clear step-by-step instructions with diagrams. <br>- System components are designed for easy integration with existing setups. |
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| US004 | Business owner | Ensure system reliability | Consistent hot water supply, minimal downtime | - System alerts business owner of any maintenance requirements or issues immediately. |
|  |  |  |  |  |
| US005 | Environmentalist | Promote renewable energy adoption | Environmental impact reduction, advocacy | - System documentation includes data on carbon footprint reduction compared to conventional heating systems. |