

Efficiency and Optimization Report: [REDACTED] Heating System

Period: year 2025, 2026

Objective: Evaluation of smart control algorithms and system stabilization.

1. System Stabilization and Predictability

The most significant achievement in the optimization process is the transition from a "chaotic" system to a **highly predictable and stabilized** one.

- **2025 Analysis (The "Chaos" Phase):** As seen in **Figure 1**, the gas consumption data from early 2025 shows no clear correlation with outdoor temperatures. This indicates that the heating plant was operating inconsistently, leading to energy waste and lack of control. Also we need to mention that outside air temperatures in 2025 were quite higher than outside air temperatures in January and February of 2026. In Figure 1 we can see that there are no low outside air temperatures.
- **2026 Analysis (The "Optimized" Phase):** **Figure 2** demonstrates a clear mathematical correlation between outdoor temperature and gas consumption ($y = -1.55x + 25.69$). This confirms that the system is now responding accurately to external conditions.

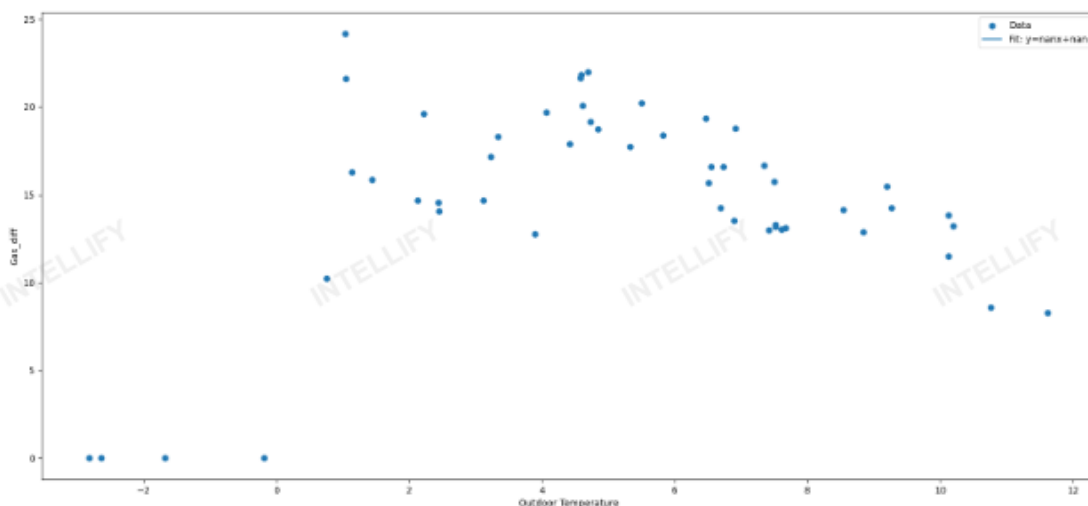


Figure 1

Efficiency and Optimization Report: [REDACTED] Heating System

Period: year 2025, 2026

Objective: Evaluation of smart control algorithms and system stabilization.

1. System Stabilization and Predictability

The most significant achievement in the optimization process is the transition from a "chaotic" system to a **highly predictable and stabilized** one.

- **2025 Analysis (The "Chaos" Phase):** As seen in **Figure 1**, the gas consumption data from early 2025 shows no clear correlation with outdoor temperatures. This indicates that the heating plant was operating inconsistently, leading to energy waste and lack of control. Also we need to mention that outside air temperatures in 2025 were quite higher than outside air temperatures in January and February of 2026. In Figure 1 we can see that there are no low outside air temperatures.
- **2026 Analysis (The "Optimized" Phase):** **Figure 2** demonstrates a clear mathematical correlation between outdoor temperature and gas consumption ($y = -1.55x + 25.69$). This confirms that the system is now responding accurately to external conditions.

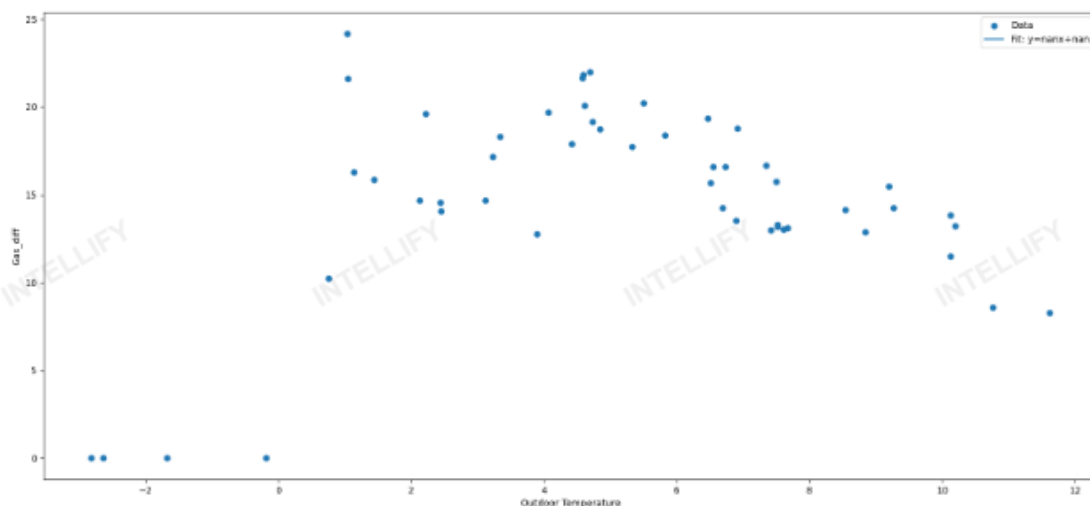


Figure 1

Efficiency and Optimization Report: [REDACTED] Heating System

Period: year 2025, 2026

Objective: Evaluation of smart control algorithms and system stabilization.

1. System Stabilization and Predictability

The most significant achievement in the optimization process is the transition from a "chaotic" system to a **highly predictable and stabilized** one.

- **2025 Analysis (The "Chaos" Phase):** As seen in **Figure 1**, the gas consumption data from early 2025 shows no clear correlation with outdoor temperatures. This indicates that the heating plant was operating inconsistently, leading to energy waste and lack of control. Also we need to mention that outside air temperatures in 2025 were quite higher than outside air temperatures in January and February of 2026. In Figure 1 we can see that there are no low outside air temperatures.
- **2026 Analysis (The "Optimized" Phase):** **Figure 2** demonstrates a clear mathematical correlation between outdoor temperature and gas consumption ($y = -1.55x + 25.69$). This confirms that the system is now responding accurately to external conditions.

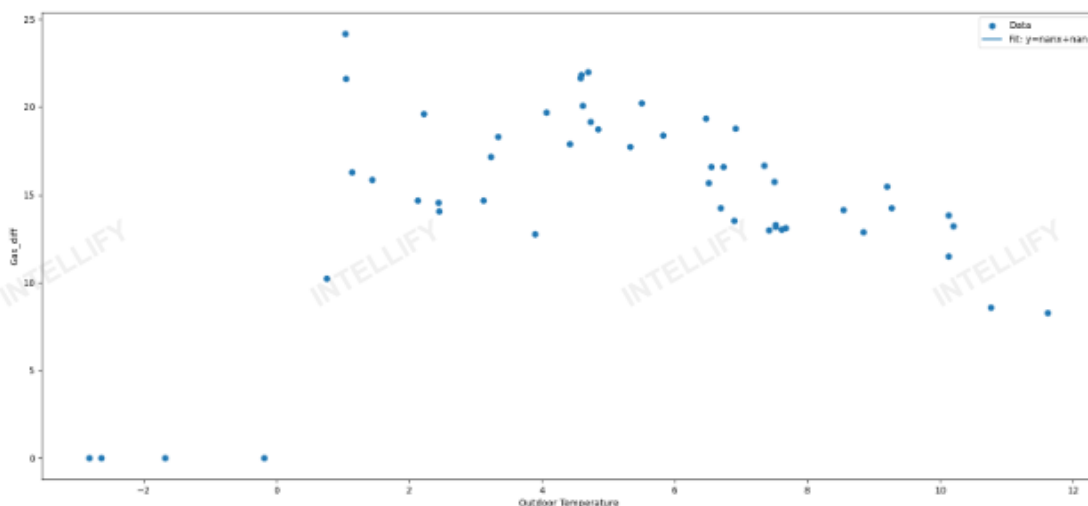


Figure 1

Efficiency and Optimization Report: [REDACTED] Heating System

Period: year 2025, 2026

Objective: Evaluation of smart control algorithms and system stabilization.

1. System Stabilization and Predictability

The most significant achievement in the optimization process is the transition from a "chaotic" system to a **highly predictable and stabilized** one.

- **2025 Analysis (The "Chaos" Phase):** As seen in **Figure 1**, the gas consumption data from early 2025 shows no clear correlation with outdoor temperatures. This indicates that the heating plant was operating inconsistently, leading to energy waste and lack of control. Also we need to mention that outside air temperatures in 2025 were quite higher than outside air temperatures in January and February of 2026. In Figure 1 we can see that there are no low outside air temperatures.
- **2026 Analysis (The "Optimized" Phase):** **Figure 2** demonstrates a clear mathematical correlation between outdoor temperature and gas consumption ($y = -1.55x + 25.69$). This confirms that the system is now responding accurately to external conditions.

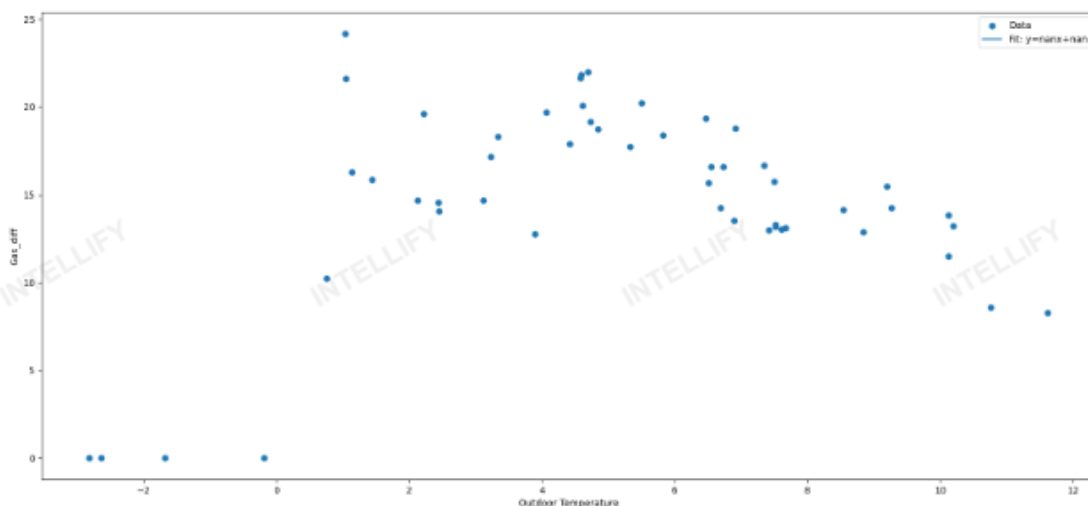


Figure 1

Efficiency and Optimization Report: [REDACTED] Heating System

Period: year 2025, 2026

Objective: Evaluation of smart control algorithms and system stabilization.

1. System Stabilization and Predictability

The most significant achievement in the optimization process is the transition from a "chaotic" system to a **highly predictable and stabilized** one.

- **2025 Analysis (The "Chaos" Phase):** As seen in **Figure 1**, the gas consumption data from early 2025 shows no clear correlation with outdoor temperatures. This indicates that the heating plant was operating inconsistently, leading to energy waste and lack of control. Also we need to mention that outside air temperatures in 2025 were quite higher than outside air temperatures in January and February of 2026. In Figure 1 we can see that there are no low outside air temperatures.
- **2026 Analysis (The "Optimized" Phase):** **Figure 2** demonstrates a clear mathematical correlation between outdoor temperature and gas consumption ($y = -1.55x + 25.69$). This confirms that the system is now responding accurately to external conditions.

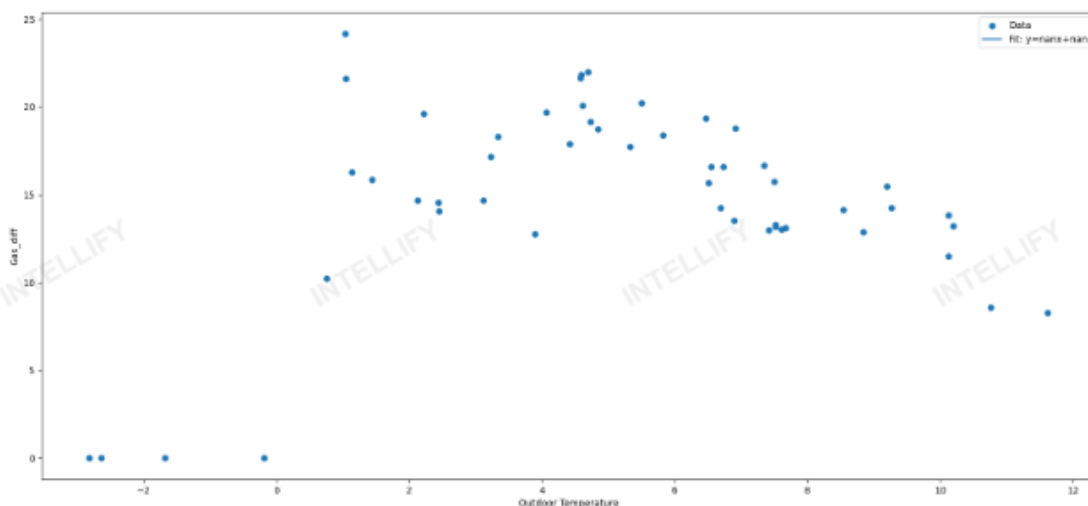


Figure 1

Efficiency and Optimization Report: [REDACTED] Heating System

Period: year 2025, 2026

Objective: Evaluation of smart control algorithms and system stabilization.

1. System Stabilization and Predictability

The most significant achievement in the optimization process is the transition from a "chaotic" system to a **highly predictable and stabilized** one.

- **2025 Analysis (The "Chaos" Phase):** As seen in **Figure 1**, the gas consumption data from early 2025 shows no clear correlation with outdoor temperatures. This indicates that the heating plant was operating inconsistently, leading to energy waste and lack of control. Also we need to mention that outside air temperatures in 2025 were quite higher than outside air temperatures in January and February of 2026. In Figure 1 we can see that there are no low outside air temperatures.
- **2026 Analysis (The "Optimized" Phase):** **Figure 2** demonstrates a clear mathematical correlation between outdoor temperature and gas consumption ($y = -1.55x + 25.69$). This confirms that the system is now responding accurately to external conditions.

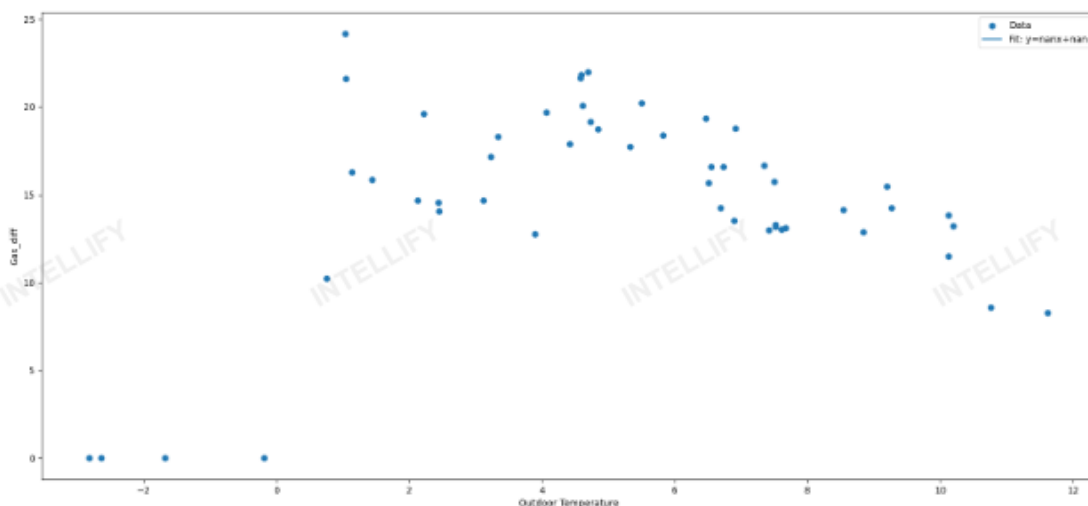


Figure 1

Efficiency and Optimization Report: [REDACTED] Heating System

Period: year 2025, 2026

Objective: Evaluation of smart control algorithms and system stabilization.

1. System Stabilization and Predictability

The most significant achievement in the optimization process is the transition from a "chaotic" system to a **highly predictable and stabilized** one.

- **2025 Analysis (The "Chaos" Phase):** As seen in **Figure 1**, the gas consumption data from early 2025 shows no clear correlation with outdoor temperatures. This indicates that the heating plant was operating inconsistently, leading to energy waste and lack of control. Also we need to mention that outside air temperatures in 2025 were quite higher than outside air temperatures in January and February of 2026. In Figure 1 we can see that there are no low outside air temperatures.
- **2026 Analysis (The "Optimized" Phase):** **Figure 2** demonstrates a clear mathematical correlation between outdoor temperature and gas consumption ($y = -1.55x + 25.69$). This confirms that the system is now responding accurately to external conditions.

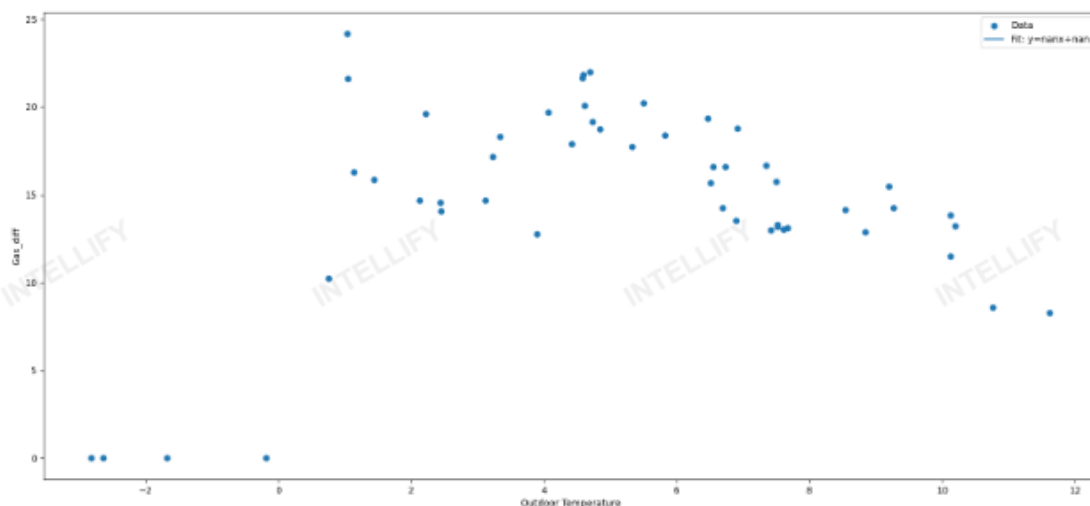


Figure 1