Infratechnology is an international company that innovated, developed, and commercialized the next generation of GTL plants. Infra technology based on the Fischer-Tropsch synthesis process, for the production of high-quality, clean liquid synthetic oil and other liquid fuels from natural and associated gas, as well as from biomass and other fossil fuels (X motor fuels from natural and associated gas, as well as from the production of light synthetic oil and clean liquid synthetic technology, based on the Fischer-Tropsch synthesis process, for the production of high-quality, clean liquid synthetic oil and other liquid fuels from natural and associated gas, as well as from biomass and other fossil fuels (X motor fuels from natural and associated gas, as well as from the production of light synthetic oil and clean liquid synthetic oil).

Infratechnology is the only company worldwide that carried out this conversion of natural gas into synthetic crude oil. Infra technology has issued for 44 key patents and is a member of the list of 10 most promising high-technology companies in Russia. Our company is considered a leader in the development and production of new fuel types and solutions for adapting energy systems.

Infratechnology Group is an innovation-based company developing and commercializing technologies that aim to profoundly alter energy, resource systems, and materials and to profoundly alter energy, resource systems, and materials.

Mission
Our Mission
Infratechnology Group is an innovation-based company developing and commercializing technologies that aim to profoundly alter energy, resource systems, and materials and to profoundly alter energy, resource systems, and materials.

Scalable.
Reliable.
Efficient.
Profitable.

Economy of scale

M100 — First-to-Many
Compact modular, transportable GTL plant, based on the Fischer-Tropsch synthesis technology, for the production of high-quality, clean liquid synthetic oil and other liquid fuels from natural and associated gas, as well as from biomass and other fossil fuels (X motor fuels from natural and associated gas, as well as from the production of light synthetic oil and clean liquid synthetic oil).

Economy of Scale

Plants' scalability

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The patented Infra’s technology represents the new generation of the classical Fischer-Tropsch synthesis process, differentiated by the use of the unique proprietary pelletized cobalt-based catalyst.

### Applications

**Synthetic Oil**

Infra’s technology enables monetization of gas, thereby allowing it to be used as an alternative source of fuels and petrochemicals. The gas is converted into synthetic crude oil, which is then upgraded into liquid motor fuels.

**Hydrocarbons**

Infra’s technology produces hydrocarbons, mostly liquid hydrocarbons C5+. The process is designed to produce a wide range of products, including diesel and gasoline.

**Gas Cleaning**

Infra’s technology includes a step for desulfurization, which is crucial for reducing the sulfur content in the final product. This step is integrated into the process to ensure compliance with environmental standards.

**Reformer**

The reformer is a critical component of the process, as it converts heavy hydrocarbons into lighter hydrocarbons, which are then used as feedstock for the Fischer-Tropsch synthesis step.

**Conditioning**

The conditioning stage includes gas processing and cooling, ensuring that the feedstock is in the appropriate state for the Fischer-Tropsch reaction.

**Syngas**

The syngas is a mixture of hydrogen and carbon monoxide, which is the primary feedstock for the Fischer-Tropsch synthesis step.

**H2**

Hydrogen is an essential component of the Fischer-Tropsch synthesis process, as it is used to reduce carbon oxides to hydrocarbons.

**Syngas**

The syngas is a mixture of hydrogen and carbon monoxide, which is the primary feedstock for the Fischer-Tropsch synthesis step.

**CO**

Carbon monoxide is another key feedstock for the Fischer-Tropsch synthesis process. It is used to reduce carbon oxides to hydrocarbons.

**Reactor**

The reactor is where the Fischer-Tropsch synthesis occurs. It is a fixed-bed reactor with a high degree of productivity.

**Separation**

The separation stage involves the purification of the liquid product, ensuring that it meets the desired specifications.

**Product**

The final product is synthetic crude oil, which can be used as a drop-in fuel or as a feedstock for further processing.

**Simplified process flowsheet, no need for infrastructure.**

Infra’s technology is self-sufficient for water, steam and electricity, making it a viable option for remote and off-grid locations.

### Feasible Gas Monetization

Infra’s technology can be used to monetize gas resources, offering a solution for clean burning fuels or synthetic crude oil. Mix it with mineral oil and transport the mixture using the existing gas infrastructure.

### Gas Monetization

Infra’s technology enables monetization of gas, thereby allowing it to be used as an alternative source of fuels and petrochemicals. The gas is converted into synthetic crude oil, which is then upgraded into liquid motor fuels.

### Eliminating Gas Flaring

Infra’s technology reduces the need for gas flaring, improving the efficiency of gas monetization and reducing environmental impact.

### Improving shale gas economics

Infra’s technology offers integrated solutions for gas upgrading and downstream liquid products that significantly improve the economics of shale gas projects.

### Making conversion of coal into liquid fuels economic

Infra’s technology enables the conversion of coal into liquid fuels, making it possible to utilize coal resources in regions with high coal dependency.

### Infrastructure

Infra’s technology enables the development of modular units, allowing for flexible and scalable solutions.

### Future

Infra’s technology offers a comprehensive solution for gas monetization, including modular and flexible solutions, as well as integrated liquid products.