Gain the real-time information you need to dramatically improve operational efficiencies and employee safety in your facilities. Put the power of Cisco IoT technologies to work for you. By using the Cisco Connected Refinery solution set, you can combat the challenges of rising material and production costs and increasingly strict health and safety regulations — and grow your business faster at the same time.

**Drive better business outcomes by getting full value from your IoT data**

Cisco Connected Refinery solutions, featuring the Cisco Kinetic platform, make it possible to streamline the way you work and quickly realize quantifiable benefits. As an example, for a large plant, here are some use cases and potential results that can improve your bottom line.

- **Improve worker safety**
  - Avoid $1.5-3M cost per incident
  - Fines, downtime, workers’ compensation

- **Increase productivity**
  - Add $23.6K per day productivity
  - 583 plant workers, 3x shifts, $27/hr, ¼ hour regained per 8 hour shift

- **Reduce waste & processing**
  - Save $10-15M annual reprocessing
  - Aggregated across multiple incidents

- **Shorten turnaround times**
  - Regain $1.3M per hour lost production
  - 598K bbl/day refining capacity, $55 bbl feedstock

- **Minimize fines & penalties**
  - Avoid $180-340K cost per incident
  - Fines for releases into atmosphere; larger fines for ground/water spills

**AT-A-GLANCE**

**OIL & GAS: REFINERIES & PROCESSING PLANTS**

Amplify productivity with automated tasks and predictive maintenance to minimize downtime.
Turn data-driven plant intelligence into real business benefit

The plant of the future is a place where advanced technologies and well-equipped, highly skilled workers interact to dramatically improve the standards for operational efficiency, safety and automated intelligence. Use Cisco Kinetic to get the right data to the right place at the right time, and feed your applications and visualization tools so you can:

- Prevent equipment failure and downtime by predicting maintenance needs before incidents occur.
- Give workers access to the right technologies to complete their job first time, wherever they are to improve productivity and wrench time.
- Immediately detect gas leaks, correlate them with employee location, and provide the best evacuation routes to meet safety and compliance goals.
- Automate routine tasks, enabling workers to focus on activities that impact the business and customers.
- Leverage advanced security technologies and gain crucial visibility into plant operations to mitigate an expanding threat landscape.

By deploying Cisco IoT technologies, you can create a better connected and automated refinery, creating new insights that deliver continuously optimized performance of the whole plant in real-time – with measurable results.

### Safety

3X fewer recordables and process incidents

### Availability/Reliability

4% higher availability

Half the maintenance costs

### Financial/Production/Optimization

10% higher utilization rate

20% lower operating costs

### Sustainability/Energy/Emissions

30% less energy use

30% lower emissions

Data sources: Refining and Petrochemical Benchmarks, API, Solomon, OSHA, HIS, Emerson
Extract, compute and move IoT data to your applications

Cisco Kinetic

Move data
Enforce data control policy
Visualization
Edge & fog processing
Data extraction

End-to-end Security

Cisco network

Secure connection

Data source

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Maximize the value of your IoT data with Cisco Kinetic

Cisco Kinetic is a foundational platform that helps you optimize your IoT data to increase production output, improve operational efficiencies and enhance worker safety in your refineries and plants. With industry-specific architectures, technologies and standards, and end-to-end multi-vendor validated solutions, you’ll have the power and agility to drive bottom line results.

Cisco Kinetic supports all types of data, devices and communication methods, giving you total flexibility. Together with partner technologies, this platform delivers numerous benefits:

**Purpose-built to drive value**
- Consistent, unified network architecture (customer-defined)
- Open ecosystem for customers, partners, third parties
- Global delivery and services capabilities

**Robust capabilities for optimal results**
- Contextual multi-sourced data correlation
- Extensibility beyond process monitoring
- Ability to leverage or unify cross domain data
- Rich operational and actionable insights

**Reduce time to deploy, speed time to business value**

Cisco Kinetic is a foundational platform that helps you optimize your IoT data to increase production output, improve operational efficiencies and enhance worker safety in your refineries and plants. With industry-specific architectures, technologies and standards, and end-to-end multi-vendor validated solutions, you’ll have the power and agility to drive bottom line results.

Learn more
Visit [www.ciscokinetic.com](http://www.ciscokinetic.com)