

# THEORY AND PRACTICE: A PATH FROM ENERPO GRADUATE TO LEAD SURVEILLANCE ANALYST AT A COMMODITIES FUTURES EXCHANGE

Interview with **Michael Roh**

Held by **Irina Mironova**, adapted by **Anastasiya Oshchepkova**

## Abstract:

In today's changing international environment, it is important for young specialists to find their place in the professional world. Education is a cornerstone of this process, so the ENERPO educational program helps students pave their way for a successful career in the energy sector. This is an interview with Michael Roh, an ENERPO graduate now working as a lead surveillance analyst at a commodities futures exchange.

**Keywords:** career path of ENERPO graduates, ENERPO program, Henry Hub, natural gas trading

## Теория и практика: от выпускника ЭНЕРПО до ведущего аналитика биржи товарных фьючерсов

**Аннотация:** В сегодняшней изменчивой международной обстановке молодым специалистам важно найти своё место в профессиональном мире. Образование является краеугольным камнем этого процесса, поэтому образовательная программа ЭНЕРПО помогает студентам проложить путь к успешной карьере в энергетическом секторе. Данная статья представляет собой интервью с Майклом Ро, выпускником ЭНЕРПО, который в настоящее время является ведущим аналитиком биржи товарных фьючерсов.

**Ключевые слова:** карьерный путь выпускников ЭНЕРПО, программа ЭНЕРПО, торговля природным газом, Henry Hub

In an interview with Michael Roh, our graduate from ENERPO Class 2016, we asked him about his career path and specifics of his work. Our goal was to illustrate how his time spent at EUSP was beneficial for his professional career. Moreover, we wanted to highlight for our readers what skills and knowledge would be useful to gain success in this field.

In 2015, Michael came to Saint Petersburg to study at EUSP. He also received a MA degree from King's College London. He then started his career as an analyst at one of the price reporting agencies in New York. Today Michael works as a lead surveillance analyst at CME, a derivatives exchange.

Irina Mironova reached out to Michael to get an update on his life and career following his studies and asked him to share with us some of the functions of his current position.

**IRINA:** Hi Michael! We are now looking for input from our graduates for the ENERPO Journal. Could you tell us about your current job?

13:00

**MICHAEL:** Hi Irina! Yes, sure. I'm working now in market regulation at a derivatives exchange called CME.

In a nutshell, the job is to surveil trading activity on the exchange to identify and prevent market manipulation. I monitor futures prices, trading volume, open interest and participants' futures positions (how many

open contracts they hold). Those positions are monitored to ensure their compliance with the exchange's position limits, especially as contracts approach their expiration. The job also involves communicating with futures market participants to ask about things such as the strategy behind their positions and their plans for liquidating them.

I work on a team that helps with the process of launching/delisting and modifying contracts, while some of my fellow analysts work on a team responsible for reviewing and granting applications for hedge exemptions.

Every surveillance analyst is assigned their own contracts. My main responsibility is to monitor the New York Mercantile Exchange (NYMEX)'s natural gas contract, which is the most traded natural gas futures contract in the world.

13:01 ✓✓

**IRINA:** Your job is very compliance-oriented. To understand what skills and knowledge are needed to be a successful market surveillance analyst in natural gas trading, let me ask you a few questions about the specifics of your work as well as current market trends. Could you explain some concepts which are essential for your professional sphere? For example, shed some light on the meaning of an exchange in derivatives trading and the importance of Henry Hub for the international market. Also, what is the practical meaning of an exchange in derivatives trading? Why go to an exchange when you can do OTC (over-the-counter)? I mean, we teach that at ENERPO of course, but it would be very interesting for the readers to get the practitioner's view on this.

13:02

**MICHAEL:** An exchange facilitates futures trading and can be more attractive than trading OTC because the exchange guarantees that contracts will be honored. Futures traded on an exchange are centrally cleared, so this means that a participant trading a futures contract doesn't have to worry about the party on the other side defaulting. An exchange is also transparent about pricing and tends to be more liquid than the OTC market. An exchange also standardizes contracts so that every contract has the identical specifications like the quantity and expiration date. For example, each

NYMEX Henry Hub Natural Gas contract is 10,000MM-Btu and terminates on the 3rd to last business day of the month prior to the contract month.

13:03 ✓✓

**IRINA:** Henry Hub is quite a special item for the natural gas market. The concept of a gas hub is a staple for liberalized markets, and Henry Hub serves as an inspiration for regulators in other countries who wish to reorganize their natural gas markets to look more like the US. Can you talk about the benefits of such market organization, and maybe if there are some challenges inherent to this model you can also shed light on it?

13:04

**MICHAEL:** Henry Hub is the benchmark price for the natural gas market. And to understand why, you need to consider its location. The hub is in Louisiana and is connected to Texas through the Sabine Pipeline. Both Texas and Louisiana produce a significant volume of natural gas – combined it's about a third of US production. And there is also production offshore in the Gulf of Mexico. Henry Hub is also linked to other regional markets in the US, as it interconnects with nine interstate and three intrastate pipelines, connecting the larger US market through this one place. This means the gas can be pumped to places like the Northeast and Midwest. Henry Hub is also connected to storage facilities, both directly and indirectly through interconnected pipelines. This is all why the Henry Hub price is a reliable indicator of the US market's supply and demand.

Henry Hub's location is also strategic because it is connected to the global market through LNG, and most LNG export terminals in the US are in the Gulf of Mexico. US LNG is accelerating the influence of Henry Hub around the world. The US became a net exporter in 2017 and these volumes continue to grow. One somewhat recent development is Europe's increased appetite for LNG as they're weaning themselves off of Russian piped gas. And the US is helping to fill that need. US LNG exports to Europe more than doubled last year.

There are other hubs in the world. But outside Henry Hub in the US, markets like Europe and Asia haven't managed to create a single hub. In Europe, the market is fragmented because there are several national hubs in competition with each other. The Netherlands has the Title Transfer Facility (TTF) and the UK has the

National Balancing Point (NBP), and those are the two most advanced European hubs, but neither is as developed as Henry Hub. Europe is a much smaller natural gas market and both of those hubs are less liquid than Henry Hub. Asia is even more fragmented. And that's why historically, the pricing mechanism for LNG contracts with European and particularly Asia buyers was crude oil indexation. The problem with indexing to crude is that it's a separate market and the prices don't always move in tandem. Even the two largest LNG exporters, Qatar and Australia, use Henry Hub for their contracts because they prefer it to oil indexation, even though they're obviously nowhere near Louisiana.

13:05 ✓✓

**IRINA:** What have you learned about natural gas hubs (or Henry Hub in particular) at ENERPO that prepared you for your current job? What were the most memorable experiences at EUSP?

13:06

**MICHAEL:** The ENERPO coursework covered various topics in the politics and economics of energy, but the lessons that come to mind that are now applicable for my current role were those on derivatives, pricing mechanisms, and hubs. But outside the classroom, my education was enriched by the visiting speakers at the university, who came from the Russian energy industry, think tanks, foreign governments, etc. And the summer program EUSP offered in Tyumen was particularly memorable, especially the tour of the refinery.

13:07 ✓✓

**IRINA:** Thank you, Michael! I believe the information you shared with us will be very useful for our readers and potential students!

13:08

#### About Michael Roh

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Michael Roh is a lead market surveillance analyst at CME. He has previously worked at one of the price reporting agencies in New York. In 2016, he was the Deputy Editor-in-Chief of the ENERPO Journal.

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