

# Where the energy market and the financial industry collide.

*What level of influence does the financial markets have in reducing the costs and externalities of the energy sector and fostering its development and progress? Can you contribute as a financial actor? How. This article will show you how financial energy markets function and why the financial industry can impact the progress of the global energy agenda implementation.*



## Otto E. Niño

*Born in Guatemala from Mexican and Brazilian descent, is 38 years old and has over 16 years of experience in international finance and banking*

*As a former VP of Business Development for Citigroup Latin America, and more recently Regional Sales Head for global financial services including Markit and The Intercontinental Exchange (ICE), through his career, Otto has developed, maintain and grow business relationships with most of the top Financial Institutions (banks, asset managers and private pension & hedge funds), Public Sector entities including Central Banks, Development Banks and Multilateral Finance Organizations in the Latin American region as well as regional corporate groups in the retail, agro, energy and information industries.*

*Has a comprehensive knowledge in the products, services and solutions that continue to shape the financial industry from regulatory requirements for data and technology, risk management and trade execution for cash and derivative products all the way to other side of the spectrum related to money transfers, international payments, clearing & settlement and AML compliance.*

*During his tenure as a banker he also managed the introduction of innovation and efficiency via new products into new markets. Such is the case of the roll out of the check image clearing upon enactment of The Check Clearing for the 21st Century Act (a.k.a. Check 21 Act) where correspondent banks without local branches in Latin America were able to clear more checks faster for international payments. He also led the implementation of contingency plans on strategic alliances for Citigroup's branch extension network in Central America.*

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To understand the energy ecosystem is the first step any trader, banker, portfolio manager or financial regulator can take towards a more efficient participation of this discussion. Thus, for the purpose of this analysis, we should know that the energy ecosystem comprises a set of stakeholders that includes:

1. The Supply, or the energy companies (e.g. oil and gas, electric utilities, renewables developers, service companies, technology and equipment providers)
2. The Demand, mainly represented by large energy users (e.g. chemicals, advanced materials, metals and mining, automotive, manufacturing)
3. The Financial Sector (e.g. commercial banks, private equity, institutional investors)
4. The Policy-makers (e.g. legislators, ministries of energy, environmental agencies, financial regulators) &
5. The International organizations (e.g. International Energy Agency, United Nations Framework Convention on Climate Change)

Understanding the role of the financial sector in the context of the energy markets requires to be at least acquainted with three components, namely:

### What is traded?

The type of energy that will be traded. Any type of energy or energy resource for which sufficient supply and demand exist can be traded. These are mainly electricity, CO2 allowances, gas, coal and oil. All of which are grouped under the category of commodities.

### Where is it traded?

The marketplace depends on the nature of the commodity and has two dimensions: physical or financial. The physical markets contain the natural resources, its market participants are involved in producing energy and delivering it to consumers, and the trade is settled or completed upon the physical delivery of the product. Financial markets do not imply physical delivery of the energy, instead, they are an array of products, mechanisms, rules and participants that together flesh out the marketplace with information and tools to better handle the risks associated to one's participation whether as supplier or demander of energy products. We will focus on the financial marketplace in this article.

### When is it traded and delivered?

Today or on a future date. We distinguish between the spot market, where buying takes place on one day and selling on the following day, in the following week or in the following month, and the forward market with long-term products or "forwards". These assign the physical delivery of, for example, electricity or gas to a future date.







These three elements define the instruments or tools a financial markets participant may or may not, access the energy markets and to some extent influence in the development and accessibility to the energy markets by all other players. Energy financial instruments have appeal from an investment perspective because they can serve to hedge (or protect) against inflation and volatility, especially when increases in oil and gas prices tend to ripple across the economy from its use in several industrial activities from transportation to manufacture.

There are a number of ways to participate, whether for hedging or as an investment, in the energy markets through financial instruments. Financial markets trading mostly take place on exchanges and are subject to the rules of the exchange as well as laws and regulations in the country.

The most common financial instruments used for energy trading activities include:

1. Energy baskets or indices of energy products,
2. Derivative contracts such as Futures and Options.
3. ETFs and ETNs,
4. Stocks of companies in the energy sector
5. Amongst others...

Exchange-traded instruments, mainly materialized as contracts, are standardized, meaning that specifications for the product's quality, quantity, and location are established in advance by the exchange. Exchange rules typically permit bidirectional trading, or the ability to buy or sell with equal ease. Trading in exchanges is generally and more often conducted through electronic means such as trading platforms and websites on which traders can buy and sell, or through trading pits where traders actively call out orders to buy and sell, known as open outcry.

But not all financial energy instruments trade on exchanges. Some trades take place in the Over-the-Counter (OTC) markets where transactions are not required to be standardized but rather can range from complicated individual negotiations for one-off structured contracts to standard products traded through an electronic brokerage platform. The ability to tailor a contract to the exact needs of the counterparties is one of the chief benefits of OTC contracts.

Both exchange traded and OTC markets feed the financial and energy marketplace with lots of valuable data, which in efficiently developed financial markets flows rapidly through different channels like the oxygen carried in our blood.

Increasing volumes and velocities of data lead to significant efficiencies in energy systems. Digital data analysis can provide a real-time supply of information and insight on precise end-user usage to eliminate waste from the system. Data mining and modeling, derived from financial energy markets, also provide a more complete picture of risk and vulnerability within energy systems, across supply chains and grids, and down to the level of individual assets. These techniques enhance the decision-making of companies and regulators, helping to set routes and maintenance schedules, understand where to build redundant capacity, and inform hedging and assurance strategies.

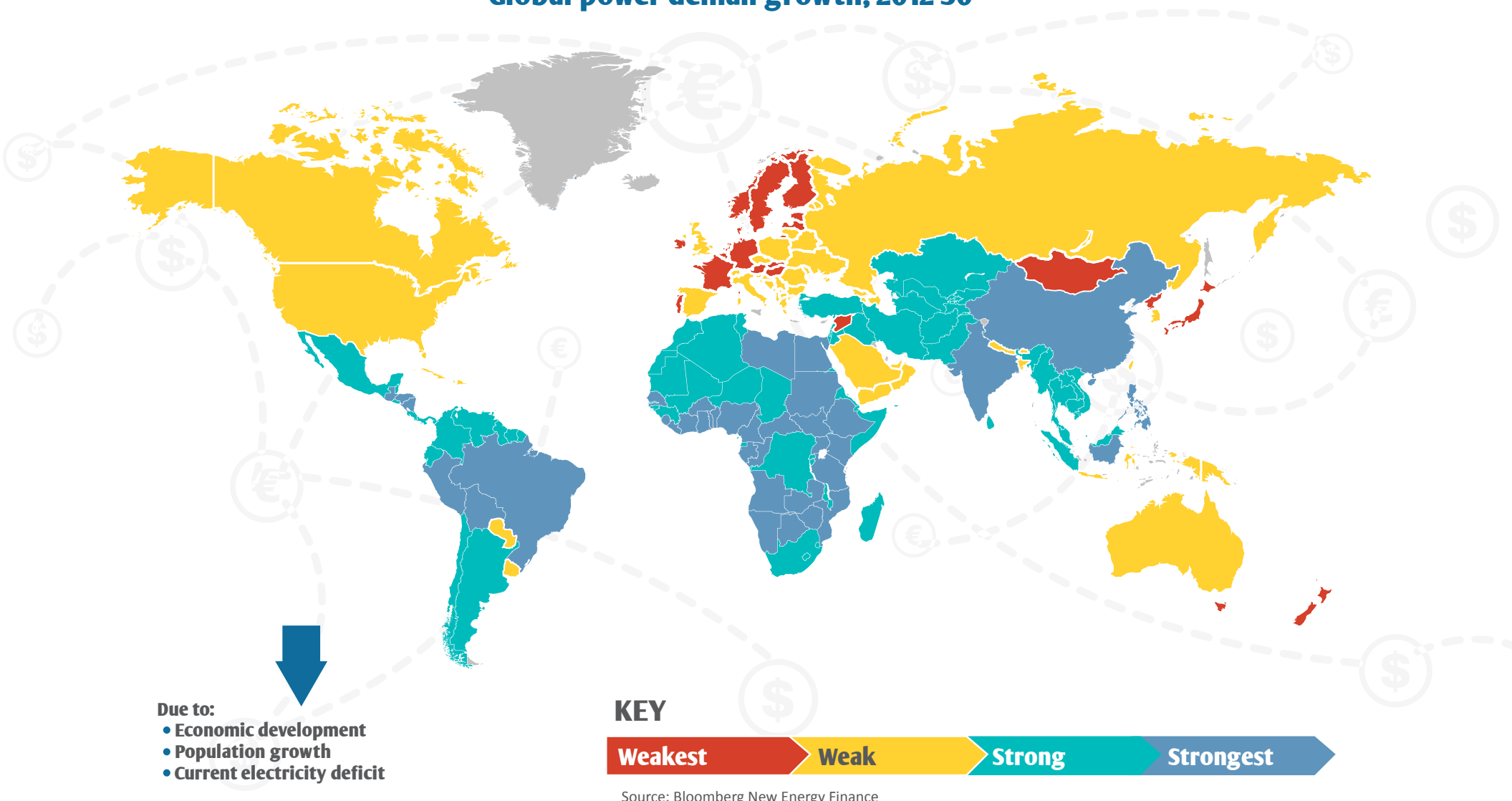




## Why is this relevant for Latin America?

According to Bloomberg New Energy Finance, Latin America (and Emerging Markets in general) will account for most of the Global Power Demand Growth participation between now and 2030.

## Global power demand growth, 2012-30



All this translates into one very important link between the energy and financial markets, that of the proper and timely financial markets evolution and international linkage. All countries, in their energy efficiency efforts, have something to teach others and plenty to learn from others and the financial markets facilitate that global conversation through a common language. Encouraging a real convergence at the international level in terms of the 'rules of the game' that shape financial markets, such as market standards, financial technology and data and financial regulations.

International financial organizations such as IOSCO and the Financial Stability Board (FSB) have taken the initiative to contribute to the harmonization and alignment between energy markets and financial markets since 2011 when a report issued by IOSCO and endorsed by the FSB, highlighted the key role that financial market authorities play in helping to ensure that the commodity derivatives markets

serve their fundamental price discovery and hedging functions while operating free from manipulation and abusive trading schemes.

If the financial markets participants do not have the proper tools to infuse efficiency in the energy markets, the ecosystem becomes loose a natural balance and one participant may control the activities of the others. Whereas, a constantly evolving financial market that includes and encompasses the energy market in its evolution, tends to foster equanimity in the power of negotiation of the ecosystem stakeholders.

This is why, no matter how many reforms, laws, number or size of players may enter or exit a marketplace, if the financial market doesn't evolve at the same path, little progress will be experienced in the efforts made by all other stakeholders of the energy ecosystem.