The last decade has been transformative for Peru’s energy sector. The Camisea natural gas project, inaugurated in 2004, now provides all the natural gas consumed in Lima and accounts for 50 percent of the nation’s power generation. For the Ollanta Humala administration, Camisea has become the cornerstone of efforts to ensure energy access for all Peruvians – so-called “massification” – and plays an important role in the government’s strategy to achieve economic growth with social inclusion.

In many ways, Camisea has exceeded expectations. The impact of natural gas production on Peru’s economic development is undeniable. Beyond revolutionizing the nation’s energy sector and boosting its economic base, the project has also prompted a rethinking of the way Peru approaches environmental and community issues across a range of extractive and infrastructure projects. Best practices developed for environmental protection and community relations have become a model for the region.

But as Peru celebrates Camisea’s tenth anniversary, it has become clear that the project alone will be insufficient to meet the country’s rising energy needs.

Instead, Camisea must be recognized as just one pillar buttressing energy security in Peru. In practice this means Peru must increase investment along the entire energy value chain. Along with a rejuvenation of the country’s oil and gas exploration efforts Peru must attract investment in infrastructure and champion the role of renewables in the power sector.

The question for participants in the Institute of the Americas’ Peru Energy Roundtable – as well as the Humala government and Peru’s investors more broadly – is how to sustain the momentum generated by Camisea. The Peruvian government, energy sector, and civil society have an opportunity to work together to develop an approach that incorporates the valuable lessons learned over the last ten years into energy projects across the country. The challenge is to do so without undermining the competitiveness of Peru’s energy sector.

Camisea at Ten

Camisea’s launch in 2004 came as Peru was emerging from decades of political and economic instability, providing a much needed injection of foreign capital and laying the foundation for public-private partnerships in the nation’s hydrocarbons sector.

The project’s contribution to both the national energy sector and the broader economy over the last ten years has been well documented but worth underscoring. Hydrocarbons production in Peru has grown an estimated 260 percent in the last decade, largely as a result of natural gas production at Camisea. Additionally, the project has brought in over $13 billion in investment and $6 billion in royalties for the national government. Camisea’s operators further estimate that the project has added $16 billion to the nation’s GDP and reduced the hydrocarbons trade deficit by $9 billion.

Peru’s Ministry of Energy and Mines has highlighted the potential for natural gas beyond the power sector, in particular industrial and transport applications. These include the replacement of diesel fuel in fleets of trucks and increase use of liquefied petroleum gas (LPG).

In the meantime, Peru is hoping that bolstering exploration and production in the Camisea fields will lead to new discoveries and boost reserves in order to meet expected spikes in demand.
The importance of natural gas in promoting the deployment of renewable resources is a common refrain heard across the region and Peru is no exception. While some observers have raised concerns that competition between cheap natural gas and hydropower in Peru’s electric market could cause a decline in hydropower’s contribution, panelists in Lima emphasized the value of both sources in a diversified energy matrix. Over time, they argued, natural gas will play a supporting role in the electric sector as more renewable sources are incorporated.

Learning from Camisea

The Camisea approach has become the gold standard for extractive and large-scale projects across Peru. The benefits of the “offshore-inland” model, based on the same principles as an offshore oil platform, have found support across industry, government, and civil society groups.

The strict standards imposed by lenders in 2004 included the stipulation that no roads be constructed to the Camisea site. Instead, project equipment and personnel are transported via helicopter and boat. According to Pluspetrol, the helicopter traffic at the Malvinas airstrip makes it the second busiest airport in Peru after the José Chávez International Airport in Lima.

Moreover, efforts to ensure a minimal environmental footprint have had significant success. Overall, just 0.01% of Lot 88 has been affected by natural gas exploration and production, according to Pluspetrol. Meanwhile, project revenues have been earmarked for local development, including training local community members as environmental monitors who keep track of the project’s impact on surrounding forests and indigenous groups in isolation and initial contact.

In terms of community engagement, Camisea’s operators point to the consultation process involving 12,000 members of the local community as evidence of due diligence. A medical passport program protects local communities by ensuring all visitors to the site have received the requisite vaccinations.

Still, despite overall approval, some human rights groups in Peru have argued that the government and operators have fallen short of their obligations. In particular they cite a lack of community consultation preceding the project’s expansion.

The additional costs incurred by the offshore-inland approach have received less attention. Hunt Oil, a member of the Camisea consortium, estimates that each exploratory well costs an additional 30 percent when carried out under these conditions. The cost of shuttling personnel and equipment via helicopter is particularly high.

The challenge moving forward is how to incorporate these best practices across the board without undermining Peru’s competitiveness and jeopardizing much-needed foreign investment in the nation’s energy sector, in particular the upstream segment.

Institutionalizing Best Practices

It is generally agreed that the best practices from Camisea’s ten years in operation should be incorporated into other large-scale projects in Peru. Not just exploration and production but also infrastructure, such as the Gasoducto Sur Peruano – a pipeline that will transport natural gas from Camisea to southern Peru. However, panelists disagreed on what form these best practices should take and who would be responsible for monitoring implementation.

Representatives from civil society argued for the Camisea approach to be incorporated into the regulatory framework at the national level, and preferably enshrined by law. One solution put forward proposed a government committee tasked with developing and monitoring activities. Further analysis is required to explore and evaluate the feasibility of this option.

Despite the obvious benefits of the offshore-inland model, questions surrounding the true costs remained unanswered. While some companies have been able to quantify the additional operational outlays, there is scant information on the upfront cost of putting best practices in place from the outset compared to the expense of social environmental conflict down the line. As other projects in Peru have demonstrated, the costs of production delays – which often run into weeks or months – can be prohibitive.
Environmental Stewardship, Community Engagement & Consulta Previa

Panelists in Lima raised the importance of community engagement and environmental stewardship throughout discussions. Civil society representatives agreed that the value of prior consultation cannot be ignored. For many communities, panelists argued, this is the only opportunity they have to share their vision and participate in the planning process.

Government representatives, however, raised the concern that there was widespread confusion both among civil society groups and communities around environmental and social issues. In particular, they noted a lack of knowledge of the new consulta previa (prior consultation) law, including when and how to use it. If it is to be a useful tool for all stakeholders, better awareness and understanding of the process is critical to ensuring its effectiveness and efficiency.

Prior consultation processes must be managed in a way that meets community needs without discouraging investment in the energy sector. As cases under the new prior consultation rules come before Peru’s courts, actors across the energy sector and political spectrum will be closely observing the outcome.

Peru could address some of these concerns by learning from approaches to prior consultation abroad. Lessons from Canada, Australia, and New Zealand could be valuable as Peru moves forward.

When it comes to environmental issues, industry executives continue to struggle with so-called “permisología”, or the excessive bureaucracy surrounding the permitting process in Peru. The delays, industry actors argued, are prohibitive and the paperwork unnecessarily onerous. One industry executive estimated that each environmental study costs between $1 and 5 million. Panelists across the board agreed that designating a single institution to facilitate the process would improve the situation dramatically.

Environmental groups also criticized the current process as being excessively complicated and convoluted. They blamed in part a lack of capacity at the government level, noting a high turnover among staff and an inadequate budget to carry out the necessary work. The recently enacted SENACE (National Environmental Certification Service for Sustainable Investments) is seen as a step in the right direction toward streamlining the process. Still, SENACE has some way to go to demonstrate its effectiveness.

Infrastructure and the Massification of Natural Gas

Peru has made the “massification” of natural gas a key component of its national energy strategy. The recently awarded contract for construction of the Gasoducto Sur Peruano is a step in that direction. President Ollanta Humala has also announced that the government will begin construction on a gas pipeline connecting Camisea to the central-northern region of the country.

Just as important for the Humala administration is the mass supply of cheap natural gas to the poor. Under the auspices of the Energy Social Inclusion Fund (Fondo de Inclusión Social Energético (FISE)), the overarching goal is to supply a million Peruvians with natural gas, with an emphasis on reaching the most impoverished.

In some of the more remote areas that may never be accessible by natural gas pipeline, the government hopes liquefied petroleum gas or LPG transported by truck can help fill the gap.
Beyond Camisea – Upstream Opportunities

While Camisea has proved a vital driver of Peru’s economic growth and energy security, it is insufficient to meet the country’s rising energy needs. Estimates point to demand for natural gas in the power sector doubling in the next decade. While according to the Peruvian Hydrocarbons Society, the national hydrocarbons trade deficit remains over $3 billion per year.

Panelists agreed that Peru can no longer rely on its stable political system and steady economic growth to attract investment in its energy sector without initiating a large-scale exploration program. Panelists noted that in 2013, Peru drilled just 7 exploratory wells, compared to 115 in Colombia. Add to this the hype surrounding Mexico’s energy reforms and there is cause for concern.

Mexico in particular has the industry worried. The country is opening its oil and gas sector for the first time in over 75 years in what could be the energy investment opportunity of the decade.

The question remains how to reverse this worrisome trend, and in particular how to promote and incentivize exploration in Peru. When asked, panelists agreed that the responsibility should be shared by both public and private sectors but failed to find consensus on an alternative approach.

In addition to streamlining or fast tracking the environmental permitting system, Peru is also in urgent need of greater transparency at all levels of government and all stages of the process to attract players from abroad. Efforts to improve infrastructure investment and regional integration are also important incentives for investors.

Integration and Interconnection – Vital for Growth

Peru’s national government hopes further growth in natural gas production will help establish the nation as an energy hub in the region. Regional markets, in particular South America and the Pacific Alliance, will play an increasingly important role in supporting Peru’s energy security in the medium term.

Peru is an integral player in the development of the Andean Electric Integration System (SINEA), for example. The project, which will connect Colombia, Ecuador, Peru, Chile, and Bolivia, aims to increase efficiency and the deployment of renewable resources throughout the region. For Peru, it would bring the additional economic benefit of opening new power markets, including Chile which pays some of the highest electricity rates in Latin America.

While pipeline infrastructure currently under consideration and construction is primarily aimed at supplying natural gas to the domestic market, analysts predict that they could eventually connect Peru to pipeline networks in Argentina, Bolivia, Chile, and Brazil.

Conclusion

It is difficult to overstate the significance of the Camisea natural gas project for Peru, both in terms of domestic energy production and economic growth, as well its lessons for community engagement and environmental stewardship. How the Peruvian government and energy industry capitalize on Camisea’s success and build a more comprehensive energy strategy may well have an even greater impact on energy security in the decades to come.

At the same time Peru must also prioritize improvements and expansion of its energy infrastructure, and work to ensure the best practices in environmental management and community engagement are incorporated into energy projects across the country.

As Peru’s Minister for Energy and Mines, Eleodoro Mayorga argued, Peru is still in the early stages of large-scale exploration and production. Indeed, the best may be yet to come. But without a large-scale exploration program Peru will struggle to sustain the growth and momentum of Camisea and meet the country’s energy needs, over the coming decade and beyond.

This report is based on discussions during the Peru Energy Roundtable, held on August 26 in Lima, Peru

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