

Center for International Environmental Law



Parallel Report submitted by the

Observatorio Petrolero Sur,

the **Center for International Environmental Law** (CIEL) and

the Global Initiative for Economic, Social and Cultural Rights (GI-ESCR)

to the Committee on Economic, Social and Cultural Rights

on the occasion of the consideration of the List of Issues for Argentina during the Committee's Pre-Sessional Working Group, 9 – 13 October 2017

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1. Submitting organisations

This Parallel Report is submitted to the Committee on Economic, Social and Cultural Rights by the following organisations:

Observatorio Petrolero Sur (OPSur)

Through research, advocacy and training OPSur seeks to strengthen democratic and fair pathways for energy and development. Under a rights-based approach, it has been working to raise awareness of Vaca Muerta developments since 2011.

The Center for International Environmental Law (CIEL)

Since 1989, the Center for International Environmental Law (CIEL) has used the power of law to protect the environment, promote human rights, and ensure a just and sustainable society.

Global Initiative for Economic, Social and Cultural Rights (GI-ESCR)

GIESCR is an international non-governmental human rights organization which seeks to advance the realization of economic, social and cultural rights throughout the world, tackling the endemic problem of global poverty through a human rights lens.

This report is endorsed by **53 organisations** operating in Argentina or Latin America - see the full list of these endorsements in the annex to this report.

2. Introduction

The adverse impacts of climate change constitute one of the most significant global threats for the enjoyment of human rights – especially the rights protected under the Covenant on Economic, Social and Cultural Rights. The magnitude of these impacts will keep increasing as temperatures continue to rise – governments must therefore ensure that they reduce emissions of greenhouse gases in a manner that prevents the most dangerous levels of temperature increase and avoids the very serious threats to economic, social and cultural rights. Such emissions reductions can only be achieved if emissions from fossil fuel consumption are significantly reduced and if the majority of oil, gas and coal reserves and resources remain unexploited.¹

Argentina ratified the Paris Agreement on 21 September 2016 and submitted a revised National Determined Contributions (NDC) laying out the commitments of the country under the Paris Agreement with regards to mitigation and adaption policies up to 2030.² However, Argentina's NDC commitment fails to address the very substantial greenhouse gas emissions associated with its planned extraction of 'unconventional

¹ See McGlade, C., & Ekins, P. (2015). The geographical distribution of fossil fuels unused when limiting global warming to 2 [deg] C. *Nature*, *517*(7533), 187-190.

 $http://www4.unfccc.int/ndcregistry/PublishedDocuments/Argentina\%20First/Traducci\%C3\%B3n\%20\\NDC_Argentina.pdf$

fossil fuels'. This is of particular concern given the objective of the Argentinian government to exploit unconventional fossil fuels in the coming years – in particular in the Vaca Muerta and other geologic formations in Neuquén Basin.

The Vaca Muerta formation covers about $30,000 \text{ km}^2$ in the north of Patagonia (Argentina). It contains major deposits of shale gas and shale oil. Shale gas and shale oil are specific types of fossil fuels that are found in shale formations. Together they are described as 'unconventional fossil fuels'. These fossil fuels can only be extracted through specific processes involving hydraulic fracturing (also known as 'fracking'), which usually involves horizontal drilling. The presence of fossil fuels in the Vaca Muerta formation was first discovered in 2010. The Vaca Muerta shale gas and shale oil resources represent around 50 billion tons of CO₂ currently locked in the ground that would be released into the atmosphere if the formation were fully exploited.

The Argentinean government has made the development of the Vaca Muerta formation an issue of national priority – both through incentives to international oil firms willing to exploit this resource and through Yacimientos Petrolíferos Fiscales (YPF) – a national Argentinian oil company majority owned by the State.

Since 2013, major contracts have been signed. Many of the largest international fossil fuel companies have expressed interest in investing several billions of USD to exploit the formation over the coming years – with many key contracts being signed between February and July of 2017. On January 10th, 2017 the national government announced an agreement with oil companies, unions and the relevant provincial government to provide a favorable environment for extraction projects in the region.³

This report highlights human rights concerns associated with the extraction of fossil fuels in the Vaca Muerta formation, in relation to:

- a. the impact of these developments on climate change and consequently on ICESCR rights such as the rights to water, housing, food, health and cultural rights; and
- b. violations of the rights to health, water, food and cultural rights, of local communities and indigenous peoples who are adversely impacted by the unconventional fossil fuel extraction activities on and near their lands, the lack of consultation with affected communities and failure to obtain indigenous peoples' free, prior and informed consent.
- 3. Climate Change and the Rights Protected under the Covenant on Economic, Social and Cultural Rights

³ http://www.lanacion.com.ar/1974553-macri-anuncio-el-plan-de-explotacion-de-vaca-muerta-esto-vaa-ser-una-revolucion-del-trabajo

It is clear that the consequences of climate change will have significant adverse impacts on the rights protected by the Covenant on Economic, Social and Cultural Rights. For instance, the Human Rights Council's Analytical Study on the Relationship between Climate Change and the Human Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health recalls that according to the World Health Organisation, projected increases in average seasonal temperatures and the frequency and intensity of heat waves will contribute to an increase in heat-related deaths among people aged over 65 years.⁴ The study goes on to note that compared to a future without climate change, this is projected to result in nearly 38,000 additional deaths per year as of 2030 and nearly 100,000 additional deaths per year as of 2050 and that the largest impacts will be felt in South-East Asia.⁵

Similarly, climate change affects nutrition through changes in crop yields, loss of livelihood, increase in poverty, and reduced access to food, water and sanitation.⁶ Disrupted supplies of water and high temperatures stress crops and promote algal blooms in reservoirs while rising ocean acidification affects fisheries. Consequently, climate change will detrimentally impact the rights to health, food, water and sanitation. Indeed, according to the World Bank, a 2°C increase in average global temperature would put between 100 million and 400 million more persons at risk of hunger and could result in over 3 million additional deaths from malnutrition each year.⁷ The WHO estimates approximately 95,000 additional deaths per year on account of under nutrition of children aged five years or less by 2030.⁸

Climate change also has severe consequences on the right to housing. Both extreme weather events and slow-onset events including sea level rise impact human settlements in both rural and urban areas. These adverse impacts impair the ability of many – and in particular those already in vulnerable situations - to exercise their right to adequate housing.⁹ This threat is exacerbated by the fact that many global risks of climate change are concentrated in urban and coastal areas where there is a higher density of human settlements.¹⁰

⁴ Human Rights Council, 'Analytical study on the relationship between climate change and the human right to everyone to the enjoyment of the highest attainable standard of physical and mental health', UN Doc. A/HRC/32/23 (6 may 2016) at para. 1

⁵ Human Rights Council, Analytical study on the relationship between climate change and the human right to everyone to the enjoyment of the highest attainable standard of physical and mental health, UN Doc. A/HRC/32/23 (6 May 2016).

⁶ *Id*. para 20.

⁷ World Bank, World Development Report 2010, pp. 4-5.

⁸ World Health Organization, *Quantitative Risk Assessment*; see also Human Rights Council, Analytical study on the relationship between climate change and the human right to everyone to the enjoyment of the highest attainable standard of physical and mental health, UN Doc. A/HRC/32/23 (6 May 2016) at para. 20.

 ⁹ Raquel Rolnik, Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context, A/64/255, 64th August 2009.
¹⁰ IPCC WG2, 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and

¹⁰ IPCC WG2, 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. [Field, C.Bet al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.

As climate change negatively impacts Covenant rights, these impacts trigger obligations and responsibility among all duty bearers.¹¹ According to the Human Rights Council's Analytical Study, States must limit anthropogenic emissions of greenhouse gases, including through regulatory measures, in order to prevent to the greatest extent possible current and future negative human rights impacts of climate change.¹² Critically, it is not enough to focus on ensuring that action against climate change respects human rights. A rights-based approach requires States to take affirmative action to respect, protect, promote and fulfil all human rights for all persons. Failure to prevent foreseeable human rights harm caused by climate change, or at the very least to mobilize maximum available resources in an effort to do so, constitutes a breach of this obligation.¹³

The Committee on Economic, Social and Cultural Rights has recognised these risks and the consequential State obligations and has urged States to take measures to mitigate and adapt to climate change¹⁴, including in relation to fossil fuel extraction¹⁵. In addition, the Committee has recognised State obligations to protect indigenous peoples and communities living on or near land used for fossil fuel extraction activities, from violations of their Covenant rights.¹⁶

The Paris Agreement

Through the Paris Agreement, governments have committed to reduce temperatures 'well below 2°C' and to pursue efforts to keep the increase of temperatures below 1.5°C.¹⁷ In a joint report to the UN Climate Change process, several UN Special Rapporteurs to the Human Rights Council have highlighted that the increase of temperatures that is already felt now is impacting adversely human rights and that an increase of temperatures to 2°C above preindustrial levels would make it correspondingly more difficult for States to fulfill their obligations under international law to respect, protect and promote human rights.¹⁸ Consequently, human rights legal obligations require that States take actions to mitigate the causes of climate change so as to maintain the increase of temperatures to a maximum of 1.5°C of warming.

¹¹ Human Rights Council, Analytical study on the relationship between climate change and the human right to everyone to the enjoyment of the highest attainable standard of physical and mental health, UN Doc. A/HRC/32/23 (6 May 2016) at para 32.

¹² Human Rights Council, Analytical study on the relationship between climate change and the human right to everyone to the enjoyment of the highest attainable standard of physical and mental health, UN Doc. A/HRC/32/23 (6 May 2016)

¹³ *Id*. at para 48.

¹⁴ E/C.12/AUS/CO/4 (CESCR, 2009)

¹⁵ E/C.12/AUS/CO/5 (CESCR, 2017), paragraph 12.

¹⁶ E/C.12/AUS/CO/5 (CESCR, 2017); E/C.12/FIN/CO/6 (CESCR, 2014); E/C.12/CAN/CO/6 (CESCR, 2016)

¹⁷ Paris Agreement, Article 2.1.a

¹⁸ *The Effects of Climate Change on the Full Enjoyment of Human Rights*, Joint paper by five mandate holders of the HRC (2015), available at

 $http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/202_109_130758775867568762-CVF\%20submission\%20Annex\%201_Human\%20Rights.pdf$

The 'Carbon Budget'

The 5th Assessment Report released by the Intergovernmental Panel on Climate Change (IPCC) in 2014 emphasised that the stabilization of temperatures in the atmosphere can only be achieved if cumulative emissions of greenhouse gases do not exceed a limited "carbon budget". The IPCC suggests that securing a carbon budget of 1000 Gt CO₂ for cumulative emissions after 2011 is compatible with a 66% likelihood of keeping the temperatures increase below 2°C while a 400 Gt CO₂ is compatible with a 66% likelihood of maintaining the temperature increase below 1.5°C.¹⁹

Given that current known fossil fuels reserves²⁰ contain an amount of carbon far in excess of this budget. States can only prevent dangerous climate change if they take action to prevent the extraction of the majority of those fossil fuel reserves. A 2015 estimate suggested that globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050 in order to secure at least a 50 likelihood of preventing an increase of temperatures above 2°C.²¹ Such a result can only be achieved if reserves that are not yet exploited are not the subject of development - particularly in relation to unconventional reserves such as shale gas and shale oil that require a comparatively higher investment and the life cycle of which generates more emissions of greenhouse gases than conventional resources 22

4. Extraction of fossil fuels in the Vaca Muerta formation and climate impacts

The United States Energy Information Agency ranks the volume of Argentina's shale gas and shale oil resources respectively in the second place (with about 10% of global unproven shale gas reserves) and fourth place (with about 5% of global unproven shale oil reserves) on the global scale.²³

¹⁹ See table 2.2 contained in the Synthesis Report of the IPCC 5th Assessment Report, (2014) https://www.ipcc.ch/pdf/assessment-

report/ar5/syr/AR5 SYR FINAL All Topics.pdf

page 64 ²⁰ 'Reserves' are oil, gas and coal resources that could be exploited under current economic conditions and have a specific probability of being produced in the absence of specific policies.

²¹ The geographical distribution of fossil fuels unused when limiting global warming to 2°C, see McGlade, C., & Ekins, P. (2015). "The geographical distribution of fossil fuels unused when limiting global warming to 2 [deg] C." Nature, 517(7533), 187-190

²² Howarth, Robert W. "Methane emissions and climatic warming risk from hydraulic fracturing and shale gas development: implications for policy." Energy and Emission Control Technologies 3 (2015): 45-54.

²³ https://www.eia.gov/analysis/studies/worldshalegas/

The total estimated resources contained in the Vaca Muerta formation reach 583 trillion cubic feet of gas and 19.9 billion barrels of oil (respectively 801.5 trillion cubic feet of gas and 27 billion barrels of oil for the overall unconventional resources for all of Argentina). They represent around 50 billion tons of CO₂ currently locked in the ground that would be released into the atmosphere if the Vaca Muerta formation were fully exploited. These emissions are equivalent to almost 1.5 times the annual CO₂ emissions from the energy sector globally.

The Vaca Muerta gas and oil reserves contain the equivalent of 7% of the remaining global carbon budget, for a 66% likelihood of preventing more than 2°C warming. It is equivalent to 25% of the global carbon budget, for a 66% likelihood of maintaining the increase of temperatures to 1.5°C.

The extraction of fossil fuels in the Vaca Muerta formation would contribute significantly to the global increase of emissions and would reduce the likelihood that global fossil fuel emissions remain within the carbon budgets suggested by scientists to avoid the most severe climate impacts.

The development of reserves such as Vaca Muerta is consequently inconsistent with the Argentina's obligations to respect, protect and fulfil the human rights protected under the Covenant. Therefore, to the extent that Argentina's energy policies continue to support fossil fuel extraction, they are inconsistent with tackling climate change and with the protection of ICESCR rights.

5. Extraction of fossil fuels in the Vaca Muerta formation and adverse impacts for the rights of local communities and indigenous peoples

In addition to the dangerous impact that the exploitation of Vaca Muerta would have for the climate and consequently for economic, social and cultural rights everywhere, recent developments related to the extraction of fossil fuels in the north of Patagonia have led to violations of the rights of local communities and indigenous peoples.

In Neuquén province, local communities and indigenous peoples have suffered repeated infringements of their rights over the past years – including of their procedural rights. Confidentiality agreements imposed by oil developers prevent local communities from accessing environmental information. Peaceful protests against the fossil fuel extraction activities on or close to their lands have also at times been met with unjustified violence such as during demonstrations held by campesinos,

indigenous Mapuche and local communities in 2013.²⁴ Also protests by Mapuche communities have led to the use of federal forces on their territories.²⁵

The development of the oil and gas industry in Vaca Muerta has proceeded on the basis of repeated violations of the right to Free, Prior and Informed Consent (FPIC) of indigenous peoples – a right that is guaranteed under the UN Declaration on the Rights of Indigenous Peoples and under the ILO Convention 169, ratified by Argentina in 2000. The failure to respect the FPIC of indigenous peoples on whose lands infrastructure is being established has led to a conflict with many indigenous communities – for instance with the indigenous Mapuche community of Campo Maripe.²⁶ For instance, a new operating plan attracting investments in Vaca Muerta was agreed between the government of the province of Neuquén, oil unions and companies in the sector in 2016, but without indigenous participation.²⁷

Oil and gas extraction in the Neuquén and Río Negro provinces have also led to serious concerns about failure to protect the right to health of local communities and to prevent environmental degradation. In his 2012 report on the situation of indigenous peoples in Argentina, the UN Special Rapporteur on the rights of indigenous peoples noted specific issues related to environmental pollution resulting from the oil and gas industry in the Neuquén Province.²⁸ This pollution has had significant adverse impact on the rights to water, housing, health and culture of the local communities and indigenous peoples. For instance, two radioactive spills occurred in wells in 2014^{29} and 240,000 litres of contaminated water was spilled in 2016^{30} .

The scale of the plans to increase hydraulic fracturing in the region raises additional concerns given the environmental and sanitary risks associated with this technology. The adverse effects associated with fracking have led national and local governments around the world to ban the use of this technology.³¹

Impacts of fracking on human rights

The technologies and processes used to extract unconventional gas and oil through

²⁴ https://www.pagina12.com.ar/diario/ultimas/20-227770-2013-08-28.html

²⁵ https://www.pagina12.com.ar/45911-otro-apriete-de-gendarmeria-en-territorio-mapuche

²⁶ A/HRC/33/NGO/62

²⁷ http://www.lanacion.com.ar/1974553-macri-anuncio-el-plan-de-explotacion-de-vacamuerta-esto-vaa-ser-una-revolucion-del-trabajo

²⁸ A/HRC/21/47/Add.2, 43(2)

²⁹ http://www.rionegro.com.ar/sociedad/pierden-otra-pastilla-radiactiva-en-un-pozo-petrolero-IORN_3080637

³⁰ http://www.rionegro.com.ar/sociedad/multan-a-ypf-por-el-derrame-de-agua-salada-e-hidrocarburosen-allen-AD2858460

³¹ Currently, four countries (France, Bulgaria, Ireland, and Germany), two States in the U.S. (New York, Maryland), one province in Argentina (Entre Ríos) and numerous local towns across Latin America (Mexico, Colombia, Brazil, Uruguay, and Argentina) have banned the technique.

hydraulic fracturing, or fracking, present particular risks for local communities and the environment, with particular concerns for the **right to health**, **the right to life**, **the right to housing**, **the right to water**, **cultural rights and the right to a healthy environment**.

Fracking is a method used to recover gas and oil from shale rock. This process involves the high-pressure injection of a water mixture into the rock in order to allow the fossil fuels to flow out to the head of the well. The mixture includes water, sand and a wide diversity of chemicals.

Fracking has direct impacts on the quantity and quality of water. This process requires very large quantities of freshwater that needs to be diverted from other potential local uses. Additionally, fracking involves a high risk of groundwater contamination by the chemicals mixed with the water injected at high pressures – either through incidents or leakages over time. Regular fracking operations also generate air pollution that has adverse impacts on human health and the integrity of local ecosystems. The fracturing of the rock and the density of wells also leads to uncontrolled earthquakes impacting human settlements and undermining vital infrastructures.

For more information, see 'Extreme energy, 'fracking' and human rights: a new field for human rights impact assessments?'.³²

While we have focused this short report on local impacts in the Neuquén and Río Negro Provinces, concerns related to the direct adverse impacts on human rights of developments related to Vaca Muerta expand well beyond the region. Indeed, the exploitation of the formation requires the development of a wide range of infrastructures that are often associated with adverse economic, social, cultural and environmental impacts including waste dumps, sand extraction, pipelines, LNG plants, petrochemicals and refineries, among others.

6. Recommended Questions

Consequently, we urge the Committee on Economic, Social and Cultural Rights to require the government of Argentina to provide additional information relating to the following two parallel sets of issues related to the development of the unconventional fossil fuels located in the Vaca Muerta formation.

1. Please provide information regarding the compatibility of the extraction of fossil fuels, in particular, unconventional resources in the Vaca Muerta formation, with Argentina's Paris Agreement commitments to mitigate

³² Short, D., Elliot, J., Norder, K., Lloyd-Davies, E., & Morley, J. (2015). Extreme energy, 'fracking' and human rights: a new field for human rights impact assessments? *The International Journal of Human Rights*, 19(6), 697-736.

and adapt to climate change and its ICESCR obligations, specifically the obligation to respect, protect and fulfil the rights to housing, water, health, food and to an adequate standard of living.

2. Please provide information regarding how the State is effectively ensuring the respect, protection and fulfilment of the economic, social and cultural rights of local communities and indigenous peoples impacted by the extraction of fossil fuels in the Vaca Muerta formation, in particular, what legislative, administrative and policy measures are in place to ensure effective consultation with affected communities and the implementation of the right to free, prior and informed consent of indigenous peoples?

Annex: List of Organizations Endorsing this Parallel Report

Regional Organizations (Latin America)

Alianza Latinoamericana Frente al Fracking (ALFF) Asociación Interamericana para la Defensa del Ambiente (AIDA) Food & Water Watch Red Latinoamericana sobre Industrias Extractivas (RLIE)

National Organizations: Argentina

Central de Trabajadores de la Argentina –Autónoma (CTA-A) Fundación Ambiente y Recursos Naturales (FARN) Fundación Ecosur. Ecología, cultura y educación desde los Pueblos del Sur Greenpeace Grupo de Estudios sobre Acumulación, Conflictos y Hegemonía de la Universidad Nacional de Quilmes. Hermanas de la Misericordia de las Américas: comunidad de Argentina Programa de Extensión de cátedras "Por una nueva economía, humana y sustentable" de la carrera de Comunicación Social de la UNER (Universidad Nacional de Entre Ríos) Servicio de Paz y Justicia – Equipo de Pueblos Originarios Unidad Popular

Local organizations: Patagonia

Asamblea por el Agua, Allen Asamblea Socioambiental de Fiske Menuco Colectiva Feminista La Revuelta Confederación Mapuche de Neuquén- Zonal Xawvn Ko Fundación Ecosur. Ecología, cultura y educación desde los Pueblos del Sur, sede Patagonia Norte Grupo de Estudios Sociales de la Patagonia Norte, Universidad Nacional del Comahue Grupo de Investigación Hegemonía y Resistencias en la Norte de la Patagonia, Facultad de Derechos y Ciencias Sociales, Universidad Nacional del Comahue. Observatorio de Derechos Humanos de Rio Negro Proyecto Crecer con Esperanza, Gral. Roca, Rio Negro Tierra para Vivir Comahue – Marabunta

Other organizations from Latin America

Brasil

AMAR, Associação de Defesa do Meio Ambiente de Araucária Apromac, Associação de Proteção ao Meio Ambiente Fórum dos Atingidos pela Indústria do Petróleo e Petroquímica nas Cercanias da Baía de Guanabara (FAPP-BG) Toxisphera, Associação de Saúde Ambiental

Colombia

Alianza Colombia Libre de Fracking Censat Agua Viva – Amigos de la Tierra Colombia Colectivo por la Protección de la Provincia de Sugamuxi, Boyacá. Colectivo Tierra Libre en Defensa del Territorio, Pitalito, Huila. Comité Ambiental en Defensa de la Vida Corporación Compromiso y Observatorio Miniero Ambiental de Compromiso (OMAC), Bucaramanga Corporación Defensora del Agua, Territorio y Ecosistemas - CORDATEC Corporación SOS Ambiental. Corporación WOMAN-POMA – Iza, Boyacá. Libélula Azul Mes departamental por la defensa del agua y el territorio del Caqueta, Red de Comités Ambientales del Tolima Sabana de Torres, Santander

Costa Rica

Bloqueverde Federación para la Conservación de la Naturaleza (Fecon)

México

Alianza Mexicana contra el Fracking Amigos del Río San Rodrigo AC APDA. Asociación Potosina por la Dignidad Animal, A.C., San Luis Potosí. Centro de Investigación y Capacitación Rural AC (Cedicar) Coordinadora de Organizaciones Campesinas e Indígenas de la Huasteca Potosina A.C DECA Equipo Pueblo, A.C. - Espacio DESC Fundar, Centro de Análisis e Investigación AC Medio Ambiente y Sociedad, A.C. No Fracking Tamaulipas

Ecuador Acción Ecológica

Peru Ecodess