

Committee: Environmental Committee

Topic: Addressing the impact of fracking on the environment and water supply

Main Submitter: Republic of Turkey,

Co-Submitters: Indonesia, Mozambique, Malta, Bahrain

Signatories: Guyana, Thailand, Australia, Pakistan, Poland, Morocco, France, South Africa

The General Assembly,

Acknowledging the increasing global energy demand, projected to rise by 50% by 2050, and the critical need for diverse and sustainable energy sources,

Recognizing the economic and strategic benefits of hydraulic fracturing (fracking) for accessing previously untapped energy reserves, particularly in nations heavily reliant on energy imports,

Aware of the environmental concerns associated with fracking, including groundwater contamination, seismic activity, and greenhouse gas emissions,

Recalling the commitments of the Paris Agreement and Sustainable Development Goals (SDGs), particularly SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action), as guiding principles for sustainable energy development,

Noting Turkey's efforts in reducing its energy dependency through domestic shale resource exploration, which is projected to cut energy imports by 30% by 2030,

Recognizing the necessity of international cooperation, technological innovation, and regulatory frameworks to ensure the sustainable and responsible deployment of fracking technologies,

Alarmed by the water scarcity induced by UOGD (Unconventional oil and Natural Gas Developments) as each well requires 2.4-20 million gallons of water,

Deeply disturbed that babies born within 1 km of fracking sites are 25% more likely to have low birth weight, and in the US alone approximately 30,000 babies are born annually within 1 km of fracking sites,

Further deploring that the byproducts of the fracking process destroy and degrade natural ecosystems,

- A. Flowback water from fracking fluid returns to the surface carrying salts, heavy metals and radioactive elements that result in the degradation of aquatic ecosystems, contaminating ground and surface water,
- B. Ozone forming emissions (VOC's- Volatile Organic Compounds like benzene and toluene) from drilling equipment and transport trucks exceed acceptable levels by 2-40 times contributing to respiratory illness,

C. Well preparation requires clearing 1000-2000 square meters of land per site, contributing to habitat destruction, deforestation and soil erosion,

1. Encourages member states to adopt and enforce stringent environmental regulations for fracking activities, including:
 - a. Mandatory Environmental Impact Assessments (EIAs) prior to drilling,
 - b. Real-time monitoring of water quality and seismic activity in fracking zones, monitoring fracking chemicals.
 - c. Guidelines to minimize methane emissions and ensure proper disposal of wastewater;
2. Recommends the establishment of an International Fracking Technology Collaboration Platform (IFTCP) under UNEP, aimed at:
 - a. Sharing advancements in waterless fracking and methane capture technologies,
 - b. Promoting the development and dissemination of technologies to reduce environmental risks,
 - c. Facilitating partnerships between public and private sectors for cleaner energy solutions;
3. Further recommends the creation of regional training centers to enhance technical expertise in sustainable energy extraction, focusing on:
 - a. Safe fracking practices and environmental safeguards,
 - b. Seismic risk management and water conservation strategies,
 - c. Compliance with international standards for emissions reduction;
4. Suggests the inclusion of fracking as a transitional energy source within broader energy strategies aimed at achieving net-zero emissions, with:
 - a. Integration of renewable energy projects to complement shale energy production,
 - b. Incentives for nations investing in fracking alongside renewables;
5. Encourages partnerships with financial institutions, such as the World Bank and International Monetary Fund, to provide:
 - a. Low-interest loans for developing countries implementing sustainable fracking technologies,
 - b. Grants for renewable energy integration projects;
6. Urges collaboration between UNEP and the World Health Organization (WHO) to assess and address public health impacts associated with fracking, including:
 - a. Providing medical services in fracking regions,
 - b. Conducting studies on long-term health effects of exposure to fracking activities;
7. Requests a periodic review of global fracking practices by UNEP to evaluate:
 - a. Progress in adopting sustainable practices,

- b. Effectiveness of international cooperation and technology-sharing initiatives,
- c. Alignment with SDG 7 and SDG 13 goals.

8. Calls upon all member states to increase the amount and stringency of regulations surrounding the disposal of waste products (Used fracking fluid and sealing of wells) of the fracking process,

9. Supports the implementation of strong financial punishments to corporations found polluting and in violation of those regulations by inspections (eg. Methane leaks) such as:

- a. Increased taxes (Where such corporations are not allowed to pass the price to the consumer)
- b. Removal of subsidies where in place
- c. Fines
- d. Imprisonment of responsible individuals
- e. Injunctive relief

10. Encourages switching from diesel and gasoline drilling to E-frac technology to prevent the release of harmful ozone-forming particles, and reduction of carbon emissions,

11. Endorses using alternative fracking fluids and techniques such as:

- a. Plasma pulse technology
- b. Nitrogen based fracturing
- c. Stress coupled perforation
- d. Recycling fracking fluid

Where and when possible as a replacement for water thus reducing the danger of water scarcity and increasing efficiency,

12. Designates different zoning areas with unique regulations, such that areas with increased risk of contamination or tectonic instability have higher taxes and a lower interval between inspections to both act as a disincentive to begin operations in those regions and to decrease the risk of accidents,

13. Strongly condemns fracking operations within 3km of residential areas due to the large amount of evidence indicating the harmful effects of fracking operations on the populace,

14. Further recommends reduction of taxes or increase in subsidies to those corporations that switch to cleaner fracking technologies and liquids as an incentive for integration,

15. Requests that member states with no widespread usage of fracking as a source of energy opt for renewable energy infrastructure instead to prevent future costs of overhauling an existing foundation, as well as to be able to optimise systems.