

Forum: Environment Assembly

Question of: Devising ways to counteract the increasing acidification of the ocean

Submitted by: Germany

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THE UNITED NATIONS ENVIRONMENT ASSEMBLY,

Disturbed by ocean acidification being a threat not only to marine ecosystems but also to ocean-related industries,

Observing that air pollution from industrial and vehicle emissions, water pollution from urban wastes, and agricultural runoff are worsening ocean acidification creating acid rain,

Recalling the Paris Agreement and Kyoto Protocol, the steps to solving climate challenges, mentioned ensuring the integrity of oceans,

Urging environmentally friendly technologies to be used in reducing and monitoring carbon dioxide emissions as well as enhancing renewable energy,

Emphasizing the collaboration of nations and Institutions as their participation is a significant factor in solving ocean acidification,

1. Calls for the international adoption of the temporary implementation of technologies that eliminate acidic materials from the ocean for the urgent rise in the acidification of the ocean by:
 - a. gathering support from the member states to research, find the most suitable ways for the urgent crisis, and financially support the technology to specify:
 - i. funding from Member State who volunteers, and from environmental foundations such as the Green Climate Fund(GCF) to make a financial base for immediate action,
 - ii. designating environmental scientists associated with such as BIOACID to implement the technologies,
 - iii. providing international support space-wise by a volunteer system and decreasing the number of mandatory funds in the volunteered states,
 - b. transporting and containing carbon dioxide, which acts as the main factor in ocean acidification to implement carbon-neutral to make the total usage of carbon dioxide in use of:
 - c. savings of carbon dioxide should be regardless of the national borders,
 - i. increasing work efficiency in the process of aiming for carbon-neutral
 - d. producing temporary policies to show and control the immediate effect of implementation of environmental technology through means such as but not limited to:

- i. requesting a plan and report every month to show the immediate effect of the project,
 - ii. connecting with the Security Council to request to force and regulate, investments including funding and human resources that lead to result in immediate consequences,
2. Endorsing making policies with a long-term goal of resolving ocean acidification and to enforce member states to participate by:
 - a. including a provision about reducing carbon dioxide in the atmosphere to legislatively enforce:
 - i. instruction of companies and factories to gradually lower 40% of carbon emissions (before the policy was instructed) they use in a day by investing in ecological technology,
 - ii. a report to check once a month, reporting any companies and factories that go against the policy to pay carbon taxes and provide in the UNEA,
 - b. making ocean-protected areas that should be preserved by restricting civilian visits in the methods of:
 - i. instructing the area with endangered species, the center of the marine ecosystem, and sea plants which could help solve the problem of acidification of the ocean by reducing carbon dioxide dissolved in the ocean,
 - ii. constraining from building any factories and a thermoelectric power plant where many marine organisms, such as corals, mollusks, and some plankton species live;
3. Replacing energies that produce carbon dioxide to develop alternative energy sources to resolve ocean acidification and to instruct environmentally friendly energy sources for future generations by:
 - a. implementing renewable energy and shifting the major energy sources gradually from fossil fuels to nuclear energy detailed by:
 - i. setting the goal of making renewable energy the major energy until 2050,
 - ii. realistically approaching to replace nuclear energy as the major energy until 2035,
 - b. developing new renewable energy continuously or innovating it to invent more efficient energy sources that will provide more reliability to renewable energy,
4. Recommending the inclusion of education for environmental science and environmentally friendly technologies for future generations to grow awareness about

ocean acidification and its status quo and to increase human resources through encouraging:

- a. providing education in environmentally friendly technology and science in schools' educational curriculums mandatorily through means such as but not limited to:
 - i. promoting the measurement of pH levels of the ocean with their own hands to compare with old research or pH test results from the same region to raise awareness of the problem,
 - ii. creating at least one environment-related club in schools

b. holding campaigns that can encourage students to reduce the emission of carbon dioxide such as opening an exhibition with the topic 'reducing the CO₂ gas'

- i. holding exhibition at the country of member state which funded the most,
- ii. opening website to popularize ideas from the exhibition, especially award-winning works,

c. establishing a profession about eco-friendly technology in national universities and private universities, while encouraging students to utilize the method of:

- i. financial aid in the subject,
- ii. extra credit to take in a course,

d. spurring the recognition of research centers by being actively connected to the people on the subject of ocean acidification with the goal of:

- i. giving students opportunities to grow awareness by being instructed by professionals,
- ii. ensuring public awareness of the method of being connected with the mass media,

5. Imposing the new technology of electrochemical acid sequestration to ease ocean acidification by:

- a. emphasizing that the new technology of removing acid from the ocean and sequestering carbon out of it is an effective method to absorb carbon dioxide while protecting its inhabitants from ocean acidification through means such as:

- i. creating the acidic stream can be used to increase the alkalinity of alkaline rocks, which can absorb CO₂ from the atmosphere and stabilize it in the ocean as bicarbonate and carbonate ions,
- ii. releasing chemical materials directly into seawater has a high risk of damage to marine creatures, and removing acid from the ocean and sequestering carbon dioxide is a safer, more effective way as it does not remove acidic materials in the presence of marine creatures,

- b. further noting that the technology of electrochemical acid sequestration offers a potentially world-changing opportunity to resolve ocean acidification,

- i. noting that after the seawater goes through electrochemical procedures, the removed carbon dioxide can be stored for further investigation and used in food production, fabrication, fire suppression, and the greenhouse to stimulate plant growth;
6. Introduces the establishment of the International Research Center on Ocean Acidification(IRCOA) and International Ocean Acidification Funding Foundation (IOAFF), comprised of an appointed delegation from each country's agencies, to accomplish the goal of:
 - a. connecting specifically in the issue of ocean acidification with the Intergovernmental Panel of Climate Change (IPCC), UNEA, the Green Climate Fund(GCF), and any other ocean acidification research center operated by the government such as BIOACID,
 - b. overseeing the current issue and aiming to mitigate and lessen ocean acidification in the aspect of:
 - i. monitoring carbon emissions,
 - ii. promoting an eco-friendly technological advancement,
 - iii. collaborating nations on the issue of ocean acidification,
 - c. publishing the annual report from the delegates raised by the IPCC, UNEA, and GCF to raise public awareness, which must contain the following:
 - i. statistics of the current process of ocean acidification and carbon emission,
 - ii. analyses of the main causes of ocean acidification,
 - iii. the current progress of developing or innovating technology.
 - d. funding not only by other foundations if the fund is not enough but establishing an independent foundation that would fund in the process of:
 - i. encouraging the members of The Organization for Economic Cooperation and Development (OECD) funding annually,
 - ii. distributing in the standard of GDP.