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Equality
for a better world

Documentation of the Work of the
United Nations Industrial Development Organization
United Nations Industrial Development Organization

Committee Staff

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Agenda

1. Sustainable Production of Biofuels in Developing Countries
2. Human Security and Post-Crisis Rehabilitation
3. Increasing Corporate Social Responsibility in Developing Countries and Economies in Transition

Delegate Awards

- Guatemala
- Ukraine

Resolutions adopted by the committee

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Summary Report

The United Nations Industrial Development Organization began its first session with delegates eager to set the agenda. Divisions formed around the precise order in which the committee would address the topics scheduled. After significant debate during formal and informal session, the committee agreed to set the order as one, three, two. Preliminary discussions began on the topic of Sustainable Production of Biofuels in Developing Countries before session adjourned.

During the second and third sessions six working groups began to take shape. Working group formation was facilitated through the sharing of ideas in speeches and several rounds of caucuses. Topics debated during this session included the facilitation of information, technology sharing, enhancing research in targeted areas related to biofuels, removing trade barriers, developing effective funding methods, and addressing food security. As the session adjourned, two working groups submitted the first draft of their working papers.

The fourth session began as delegates described several further developed proposals such as public-private partnerships, gender gap in land ownership, and the 3Ss (Security, Sustainability, and Synergy). The oil-producing bloc of countries, led by Saudi Arabia and Kuwait, appealed for a slow transfer into biofuel adoption and sustainable use of traditional fuels. In addition, the BRIC countries (Brazil, Russia, India, and China) introduced their idea for developing a Biofuel Fund (BFF). After numerous speeches surrounding these topics and many suspensions for caucus, five more working papers were submitted before session adjourned. The addition of these five papers brought the total number of working papers on the floor to seven.

The fifth session saw delegates begin to move towards coalescing their ideas. Several delegates called on Member States to cooperate and merge their working paper drafts. After substantial informal discussion, the delegates were able to coordinate the merging of six out of seven working papers. The working group led by Guatemala - as well as Ukraine and others - which focused on the development of the Biofuel Investment Corporation (BIC) merged with the working group led by the Russian Federation, South Africa and Ecuador – among others – that had been promoting what had come to be known as the Biofuel Fund (BFF).

The sixth session saw the resumption of debate with considerable effort during informal caucus to bring several of the current working papers together. After several rounds of formal speeches and informal caucus, the delegates of the aforementioned blocs were able to come to consensus, submitting a working paper by the end of the session.

The seventh session began with delegates explaining working papers currently on the floor for discussion, inviting other delegates to join them for discussion and cooperation. Some debates were raised in regard to the specific mechanisms involved in the Biofuel Investment Corporation (BIC). Two more working papers merged by mid-session and were submitted to the dais; this left four working papers in the committee ready to be accepted as resolutions. After several more speeches, informal caucus, and consultation with the dais, all four working papers were accepted as draft resolution by the mid-point of the eighth session.

During voting procedure all four of the draft resolutions up for consideration passed. Two resolutions passed by acclamation, one by majority, while the other passed by majority via roll call vote. Ultimately, three amendments were accepted on Draft Resolution 1-2 – two friendly, and one unfriendly. The unfriendly amendment passed. The committee ended session proud of the hard work and cooperation all delegates involved displayed over the course of the committee’s meeting.
Draft Resolution 1-1

Committee: The United Nations Industrial Development Organization

Topic: Sustainable Production of Biofuels in Developing Countries

The United Nations Industrial Development Organization,

Reaffirming the United Nations Industrial Development Organization (UNIDO) Constitution Paragraph 4, which states that it is the sovereign right of all states to industrialize,

Bearing in mind the reports of the United Nations Framework Convention on Climate Change (UNFCCC) regarding the anticipated impacts of climate change and the need for adaptive measures, including the necessity of sustainable energy development,

Convinced that any approach to the sustainable production of biofuels must acknowledge the diverse regional and national needs, as well as the available resources of developing countries,

Emphasizing that the fastest growing countries have experienced compound annual growth of 10-15% in the consumption of energy from renewable sources according to the Sustainable Energy for All Initiative by the Secretary General in the areas of energy access, efficiency, and sharing,

Expressing its concern that according to the International Energy Agency, 90% of biofuel production originates from ethanol derived from edible feedstocks and can create a direct negative relationship between first generation biofuel production and food security,

Recalling the necessity of protecting the right to food as presented by General Assembly Resolution 66/188, which addresses excessive price volatility in food and related financial and commodity markets,

Noting MDG’s 1, 7, and 8 and The Future We Want, A/RES/64/236, which emphasize the connection between poverty and hunger reduction, environmental sustainability, climate change, and the need for multilateral cooperative development in biofuels,

Regretting that the current production of biofuels in several developing Member States is unintentionally encroaching upon the achievement of MDG 3 in relation to gender specific land ownership, employment, and entrepreneurship,

Recognizing the negative effects of premature transition to a comprehensive biofuel program on areas of energy security and structural employment by creating an unappealing investment climate that puts Small and Medium Enterprises (SMEs) at a competitive disadvantage in the world market,

Further noting that variables such as climate conditions and poor agricultural practices may make lands more suitable for biofuel production than food production,

Welcoming the further implementation of cooperative renewable energy initiatives embodying a bottom-up locally tailored approach, such as the Green Cooperation Volunteers,

Confident that second and third generation biofuels offer greater returns and pose less of a threat to food security due to the fact that they rely on resources not crucial to food production,

Acknowledging the viability of first generation biofuels to some developing states, as well as the resources necessary for efficient utilization of second and third generation methods that may not be available to all developing countries,

1. Calls for the transferring of technology and research between biofuel organizations;
2. **Recommends** the expansion and enhancement of the Investment and Technology Promotion Offices’ (ITPO) Global Network by:

   a. Expanding the creation of more offices in the Southern Hemisphere and developing states that provide south-south and north-south technology transfers;

   b. Increasing private sector cooperation to facilitate greater investment by creating an assessment program that would disclose information in the following areas:

      i. A current SME’s profitability with projected gains from economies of scale;

      ii. Transparency of business deals;

      iii. Levels of technological innovation;

   c. Using an assessment program that would grade locally owned innovative industrial enterprises with a letter-based grading system, incentivizing investment by linking foreign investors with biofuel related small and medium enterprises in developing countries;

3. **Proposes the** creation and financing of a UNIDO-based research center on biofuels that will:

   a. Implement research that further:

      i. Supports development of second generation biofuels, particularly in developing countries;

      ii. Promotes ways for implementation of *Formalizing Rights to Ancestral Lands in Latin America* by IFAD with cooperation with relevant non-governmental organizations to provide legal advice to indigenous peoples displaced by biofuel production;

      iii. Builds on the findings in the *Water Policy Brief* of the *International Water Management Institute* regarding strong water pollution and the possibility of crops that are able to use less water than current biofuel methods and suggests member states adapt these measures;

      iv. Utilizes databases such as the *Global Food Security Index* as a useful measure of comparisons among biofuel-producing countries;

   b. Consult the Programme and Budget committee of UNIDO to vote and determine the necessary budget;

4. **Requests** the focus of the research center, mentioned in clause 3, to international targets of biofuel production to promote a shift in future production in developing countries in order to:

   a. Limit the aggregate proportion of biofuel production coming from edible biomass;

   b. Increase the aggregate proportion of second and third generation biofuels;

   c. Retain the equity principle of Common but Differentiated Responsibility;

5. **Reiterates** that all programs of UNIDO ensure their approach remains sensitive to potential issues concerning human rights, including but not limited to issues concerning land displacement, food security, and sufficient access to water in order to:
a. Promote ways for implementation of *Formalizing Rights to Ancestral Lands in Latin America* by
the International Fund for Agricultural Development with cooperation with relevant NGO’s to
provide legal advice including land and water rights to indigenous peoples;

b. Support the work of the *Working Group for Women and Land Ownership in Gujarat, India* as a
model for member states to promote the awareness of discrimination in land ownership, seizure,
employment, and entrepreneurship specifically in relation to gender;

6. **Urges** member states to promote end-user technology such as household appliances that utilizes refined
biofuels, thus providing safer forms of commercial energy as demonstrated by the *Global Alliance for Clean
Cookstoves* in order to reduce health related issues pertaining to the burning and harvesting of unrefined
biomass;

7. **Emphasizes** the need for cooperation between UNIDO, Food and Agricultural Organization (FAO), United
Nations Conference and Trade and Development, and United Nations Environment Programme and encourages
research into marginal and degraded lands modeled by initiatives such as the *Global Bioenergy Partnership*;

8. **Promotes** multilateral initiatives to assist in providing food availability surveys modeled after the Alcoholes del
Uruguay (*ALUR*) system into the private sector and to contribute expertise and training for biofuel technology
use in transitioning and developing economies;

9. **Advocates** a more sustainable path for development by avoiding the resource curse associated with the creation
of biofuel production by incorporating locally owned small and medium enterprises and public institutions
involved in biofuel production;

10. **Recommends** that UNIDO Member States work in partnership with relevant UN agencies such as FAO to
enforce the already existing Bioenergy and Food Security Analytical Framework (BEFS AF) and BEFS tool
box, focusing on:

    a. The components and tools allowing countries to evaluate their needs and possibilities regarding
biofuel production;

    b. Relevant information related to land assessment, water management, biofuel production costs and
greenhouse gas emissions;

11. **Requests** that the use of first generation methods of biofuel production, namely the growth of common crops,
facilitates the simple and profitable creation of biomass and promotes capacity-building in rural areas through
community-based programs by:

    a. Mobilizing experts affiliated with the United Nations Secretariat and forming financial and
technical support for the purpose of improving agricultural education in developing states with a
particular focus on established techniques of mixed cropping between edible and energy crops;

    b. Promoting the wider cultivation of crops such as alfalfa that not only provide biomass but also
serve to replenish soil nutrients and increase the arability of the land;

    c. Stressing that community-based programs be rooted in existing on the ground conditions,
including the direct involvement of local stakeholders in the planning, implementation and
assessment phases modeled after organizations such as *Oxfam International* as well as other
NGO’s party to the *International Non Organizations Accountability Charter*;

12. **Recommends** that governments submit plots of land not currently designated for use in cultivating edible crops
for evaluation by a team of UN-affiliated experts for the viability of biofuel crop cultivation;
13. Designates that the team referenced in clause 12 will determine the potential productivity of the land within the scope of second generation biofuel crops such as jatropha, rape seed, and others, as well as the environmental impacts and concerns associated with the integration of these crops with respect to biodiversity;

14. Suggests that local farmers receive incentives from their home government, such as increased access to irrigation, in exchange for cultivating biofuel crops on the newly-rezoned land;

15. Recommends member states implement a program, modeled after initiatives such as Fiberight, with the organizational assistance of UNIDO in order to create waste-repurposed biofuels system;

16. Emphasizes that third-generation biofuel technologies can play an instrumental role in a future global, green energy economy and that their development and implementation in developing countries requires a strong international commitment from both the private and public sectors that:
   a. Puts a new emphasis on third-generation biofuels in the UNIDO General Conference with relation to existing United Nations framework guiding financial aid, foreign investment and technological assistance with respect to environmental projects;
   b. Strongly prompts existing funding programs, like the Global Environment Facility, to direct funding to UNIDO third-generation biofuel projects.
The United Nations Industrial Development Organization,

Guided by Millennium Development Goals (MDGs) 7 and 8, which promote environmental sustainability and global partnership for development,

Recognizing that a one-size-fits-all approach is not applicable to the production of biofuels, as access to biofuel materials and risks to land and food security vary from state to state,

Declaring the sovereign right of each state to pursue biofuel development in the way that best suits their specific needs,

Reaffirming the Sustainable Energy For All (SE4All) Initiative’s three main objectives, which advocate for universal access to modern energy, doubling the rate of improvements in energy efficiency and doubling the share of renewable energy in the global energy mix,

Highlighting the beginning of the United Nations (UN) Decade of Sustainable Energy for All (General Assembly Resolution 67/215), which spans 2014-2024,

Noting with concern that biofuel production may harm food security, indigenous populations, and the agricultural economy,

Having considered the World Energy Outlook’s 2013 Report, which projects that low-carbon energy sources will be necessary to meet roughly 40% of the growth in demand for primary energy by 2035,

Encouraging the spread of knowledge and awareness of the positive impacts of sustainable biofuels production as stated in the United Nations Industrial Development Organization’s (UNIDO) Biofuel strategy,

Suggesting the further utilization of existing platforms such as the European Union’s Biofuel Technology Platform to help maximize the efficiency of research operations,

Further recognizing the UNIDO Biofuels Screening Toolkit as a developed and useful tool with which to ensure sustainable development and implementation of biofuel systems,

Concerned by the UNIDO Biofuels Screening Toolkit’s limitations in ensuring the oversight of the proper implementation of its sustainability criteria,

Welcoming the use of biofuels as a means to reduce greenhouse gas emissions and to decrease global dependence on fossil fuels as stated in the outcome document of the Rio+ 20 conference, The Future We Want (A/RES/66/288), article 191, which encourages the widest possible cooperation to combat climate change,

Deeply concerned that the UN High Level Task Force on the Global Food Security Crisis Report states that the increase in cereals as feedstock has contributed to higher food prices and food insecurity,

Recognizing the Commission on Human Rights resolution 2003(22) regarding the equality of women, specifically in the expanding gender gap caused by women’s lower accessibility to land ownership,

Emphasizing the importance of food security and acknowledging the Global Food Security Index as a useful measure of a state’s ability to develop first-generation biofuels,
Acknowledging Secretary-General Ban Ki-Moon’s efforts to bring together government, the private sector and civil society, to double the share of renewable energy globally through the Sustainable Energy For All Initiative, and its possible application to the Biofuel Implementation Commission,

Noting the possible biofuel-related application of Article 14 section 2 subsection g. of the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), which establishes norms regarding women’s access to agricultural loans and credit,


Highlighting the success of Economic and Social Council (ECOSOC) Biodiesel for Rural Development partnership with the Non-Governmental Organization (NGO) TechnoServe and its program in which endorses the use of marginal land for biofuel production,

Reaffirming the need for the adaptation of EU Strategy for Biofuels (SEC/2006/142) for developing states and regions to address difficulties that may become significant for growing biofuel capacity in developing states,

Recalling resolution GC.15/Res.4 on UNIDO Activities in Energy and Environment, section g which encourages knowledge transfer and expertise sharing in the areas of manufacturing capabilities in efficient industrial processes, particularly in developing countries,

Looking forward to the realization of the United Nations Sustainable Development Knowledge Platform’s Green Cooperation Volunteer initiative and its potential to develop human resources and the environmental capacity to address concerns related to biofuel production,

1. **Recommends** that the General Conference of the UNIDO create Biofuels Implementation Commission (BIC) in collaboration with United Nations Environmental Programme (UNEP), Member States, NGOs, regional development banks, and UN experts, with the mandate to generate sustainability goals within biofuel production and use ensuring that:
   a. These goals comply with sustainability models that fall under three main categories, social, environmental, and economic sustainability;
   b. BIC provide specific recommendations for both developed and developing Member States on how to successfully reach BIC’s sustainability goals;
   c. BIC serves as an information sharing hub to share best practices on the implementation of goals and to interconnect involved stakeholders;

2. **Further recommends** that membership within BIC be:
   a. Established on a voluntary basis for:
      i. Member States of UNIDO as well as Member States of OECD;
      ii. NGOs;
      iii. Regional development banks;
      iv. Experts from relevant fields, such as economics, development, agriculture, and biofuel production;
      v. Representatives of major energy industry working groups including the International Council of Chemical Association of Oil and Gas Producers, and the International Maritime Organization in an advisory capacity;
b. Confirmed by UNIDO, taking into consideration the following criteria:
   i. Previous support through monetary donations to the UNIDO Programme and Budgeting
      Committee (PBC);
   ii. In good standing with ECOSOC;

3. Encourages BIC to develop sustainability goals for biofuel production and use based on the outcomes of the
   current working assessment reports such as the joint Global Environmental Facility (GEF), UNEP, UNIDO and
   Food and Agriculture Organization (FAO) Global Assessments and Guidelines for Sustainable Liquid Biofuel
   and the identified priorities within the Biofuels Screening Toolkit; and in particular be concerned with 4 aspects
   of biofuel production:
   a. Allocating, regulating, and monitoring the grants provided by the UNIDO PBC;
   b. Promoting investment in biofuel sectors and technology;
   c. Advocating for technology and information sharing practices;
   d. Conducting research on current and future sources of biofuel production, specifically analyzing their
      costs, methods, and externalities, with food security being a top priority;

4. Requests that the Fifth Committee of the General Assembly to examine sources of funding for BIC including:
   a. The United Nations Development Group (UNDG’s) Joint Funding Approach to facilitate fund transfers
      between the UNEP’s Sustainable Energy Finance Initiative (SEFI) and the UNIDO’s BIC;
   b. The United Nations Development Programme’s Global Partner Base for Funding;
   c. Development funding agencies such as regional development banks;

5. Designates UNIDO’s PBC to manage funding for BIC, also suggesting that:
   a. Funding be prioritized for SMEs and regional companies;
   b. Priority be given to companies and states willing to provide yearly transparency and progress reports
      of where funds are being allocated and the results of their projects in order to ensure progress and
      efficiency;

6. Suggests that UNIDO’s BIC utilize the Bioenergy and Food Security (BEFS) Approach, created by the FAO,
   which includes assessment of sustainable bioenergy potential, risk prevention and management, investment
   screening, impact monitoring, and capacity building, including training and guidance;

7. Promotes a program modeled after public private partnerships which would be led by BIC and tasked with
   promoting investment and technological dissemination within the biofuel sector in SMEs from developing
   states by the following means:
   a. Asking regional development banks further consider possible biofuel production investments within
      standard budgetary procedures in their respective regions;
   b. Supporting cooperation between NGOs, specifically foundations, with BIC to provide more grants and
      funding to biofuel SMEs;
   c. Encouraging technology and information sharing by providing financial incentives to corporations;
8. **Calls** for BIC to provide further support research in first, second, third, and fourth generation biofuels, while placing emphasis on socioeconomic aspects and food security, by:

   a. Applying scholastic models for global distribution of experts to help provide methods and suggestions on the sustainable production of biofuels in developing countries;

   b. Utilizing existing research platforms for the development of biofuel technologies with the help of organizations such as the APEC Biofuels Task Force, the Renewable Energy Centre of Research and Development (RECORD), and the Latin American, Caribbean, and European Union Network on Research and Innovation (ALCUE NET);

   c. Encouraging the establishment of fellowships for researchers who focus on sustainable biofuels production and study abroad to promote international exchange between students dedicated to biofuel research and states which are developing biofuels industries;

   d. Providing a consultation group, drawn from expert members of the BIC, whose mandate would be consulting with developing states who wish to develop their biofuel industries;

9. **Endorses** the use of existing biofuel technology and information sharing platforms to enhance the development of biofuel technologies, specifically suggesting that:

   a. The Dag Hammarskjold Library create a new database of research based on the UN Resource’s Research Guide focused solely on Sustainable Energy, which would include the production of biofuels;

   b. Strategies for technology and information sharing be improved by:

      i. Disseminating information on the tested practices of those states which have made progress in the field of biofuels, including highlighting the pros and cons of each approach and noting the overall efficiency and sustainability of their individual biofuel projects;

      ii. Promoting international exchange between higher education institutes that are related to energy research and innovation (e.g., The Energy Research Institute of the Russian Academy of Sciences), research and development organizations that focus on sustainable energy production (e.g., RECORD), and states that aim to develop biofuels industries;

10. **Further supports** BIC’s use of the Global Food Security Index and its consideration of core issues of availability, affordability and quality in determining goals for biofuel expansion in developing economies to alleviate food security concerns;

11. **Designates** Article 14, Section 2, Subsection G of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), as the standard on which BIC should approach issues of inclusion related to women in agriculture and biofuel production;

12. **Urges** BIC to develop a set of sustainability goals to safeguard the environment in partnership with UNIDO, UNEP and FAO by:

   a. Using the Global Assessment and Guidelines for Sustainable Liquid Biofuel Production in Developing Countries as a standard to assess Member States’ current biofuel production status;

   b. Ensuring collaboration between Member States and UNEP’s Intergovernmental Panel on Climate Change (IPCC) to use Life Cycle Assessments as a standardized process to forecast the impact of biofuel production on the environment;

13. **Calls upon** BIC to develop standards and processes for the production of biofuels that utilize previously unused marginal land as a resource for biofuel production;
14. Further recommends the establishment of environmental sustainability goals that follow a framework for the implementation of biofuel use in factories:

   a. Drawing on the example of the National Cleaner Production Centers (NCPC), which trains specialized agents to offer recommendations on how to ensure sustainability goals are met;

   b. To provide timelines and cost analysis on how the BIC goals could be achieved in an efficient, and cost-effective manner;

15. Suggests BIC use the six Principles of Responsible Investment (PRI) under the UNEP’s Finance Initiative in order to develop sustainable recommendations for biofuel production and use;

16. Invites Member States to work alongside BIC to implement policy initiatives, specifically the incorporation of biofuels into the transport sector modeled after Programa Brasileiro de Certificação em Biocombustíveis, which focuses on the development of certification schemes concerning the use of biofuels in transport industries;

17. Urges that the recommendations outlined in the European Commissions’ Impact Assessment Report SEC/2006/142 be adapted for global use, especially regarding options for North-South cooperation through:

   a. infrastructure investments from industrialized economies towards economies seeking to expand their biofuel capacities and increase employment of local workers;

   b. regional cooperation to ensure trading relationships which foster biofuel industry developments such as but not limited to special economic zones, removal of biofuel trade tariffs and flexibility in biofuel sourcing mandates;

18. Further Suggests for BIC to facilitate discussion regarding implementation of regulations that promote the successful extraction and processing of biofuels while emphasizing worker equality, inclusion and fairness by emulating the work of successful NGOs such as the Bali Organic Association, which works to ensure that biofuel production policies follow the Contract Farming model;

19. Requests that the United Nations General Assembly:

   a. Support the cooperation between merging economies to expedite the process of forming alternative institutions for development finance, such as those proposed at the fifth BRICS Summit held in Durban, South Africa, in order for these funding mechanisms to become available as quickly as possible to support developing states who wish to develop biofuel technologies;

   b. Invite UNIDO Member States to further explore alternative sources of financial support, including, but not limited to, the tentative BRICS states proposed;

   c. Encourage said future funds to seize upon existing opportunities for development of alternative renewable energy sources, specifically in the field of biofuel technologies.
The United Nations Industrial Development Organization,

Guided by Target 7 and 8 of the Millennium Development Goals (MDGs) in promoting cooperative sustainable development through global partnerships and integrating principles of sustainable development into states’ policies,

Believing that increased energy diversity plays a major role in the improvement of living conditions in developing states, as recognized in General Assembly Resolution 66/288, The Future We Want,

Recognizing the right of each sovereign state to regulate and develop its energy resources in the manner of its choosing,

Concerned with the possible adverse social and economic impacts of biofuels, such as the impacts on food security and food prices, due to lack of transparency of governments on their development of biofuels,

Noting the value of using the Food and Agriculture Organization’s (FAO) Bioenergy and Food Security Approach in determining the possible adverse impacts on food supply because of proposed biofuel projects,

Further recognizing the need for the further integration among the biofuel production plans throughout all Member States,

Acknowledging the challenges associated with inter-industry transition from fossil fuels to alternative energy sources, including the displacement of workers from existing energy sectors, volatility in fuel and heating markets, and the conversion of existing energy distribution infrastructures,

Further recognizing and concurring with A/RES/66/288 and A/RES/67/215 forecast of a likely economic transition from traditional fuels to biofuels, and heeding UNIDO’s constitutional mandate to encourage those changes necessary for the development of the world economy,

Realizing the need for increased sharing of best practices and knowledge among member states to develop sustainable biofuels technology and industries in developing states through an internationally accessible database that fully recognizes regional differences,

Cognizant that Small and Medium Enterprises (SMEs) constitute a significant amount of the global economy, contributing to 90% of all global businesses and over 50% of employment worldwide as reported by the International Finance Corporation,

Deeply convinced that a significant number of developing states enjoy a competitive advantage in the global production of biofuels due to a dominating agricultural sector and favorable climate conditions,

Emphasizing the considerable contribution to employment and to the development of rural areas with regards to the creation of jobs, the increase of efficient land use, and the improvement of infrastructure that the introduction of biofuels cultures and refinery facilities can secure, particularly through the establishment of local businesses and new market outlets for farmers and their products,

Further believing that the sustainable production of biofuels may thus play a major role in the process of economic and social advancement in developing states,

Regretting that Least Developed Countries (LDCs) and single-commodity dependent states may currently lack the financial and institutional capacity to support biofuel production projects, as expressed in A/RES/67/215,
Welcoming the international promotion of consensus driven and standardized approaches to the trade of biofuels that is cognizant of the importance of open and fair access to international energy markets, the current role to be played by existing producers of traditional fuels, the future role to be played by producers of biofuels in developing states,

Noting the possibility of the United Nations Industrial Development Organization (UNIDO) acting as a platform for interaction between investors and biofuel development projects to increase research in biofuels and investment in developing economies,

Recalling UNIDO’s Computer Model for Feasibility Analysis and Reporting (COMFAR), which provides short and long term analysis of financial and economic consequences for industrial and non-industrial projects,

Emphasizing the importance for all the Member States to further develop the Biofuel Screening Toolkit funded by Global Environment Facility (GEF), and carried out by the FAO and UNIDO to increase transparency and ensure that these projects to meet economic, social, and environmental sustainability,

1. Calls for UNIDO to partner with United Nations Conference on Trade and Development (UNCTAD), the Food and Agriculture Organization (FAO), and the International Energy Agency (IEA) to create the International Database for Biofuels for the purpose of sharing sustainable biofuels technology through methods such as, but not limited to:

   a. UNCTAD’s Biofuels Initiative, which involves continued sharing of lessons from successful cases, as well as illustrates problems encountered by developed and developing states in dealing with the technical, policy and economic aspects of biofuels;

   b. The recommendations which the IEA releases for the advancement of biofuels in its Tracking Clean Energy Progress reports, research done by the Biofuel Screening Toolkit, and the specific legal and economic policy analysis on biofuels initiative by UNCTAD’s BioFuels Initiative;

   c. Emulating UNIDO and the International Centre on Small Hydropower’s joint database by including a country report regarding biofuels information about each country’s:

      i. Renewable energy policy;

      ii. Barriers to biofuel development, such as negative effects on food security, which will be provided by the FAO’s and Bioenergy and Food Security (BEFS);

      iii. Potential of biofuels and its production;

      iv. Population;

      v. Area;

      vi. Climate;

      vii. Topography;

   d. Updating recommendations to a state based on existing conditions in that state while drawing from successful biofuel production projects in other states with similar environmental and social conditions through biofuels research and innovation provided by the IEA, the Biofuels Screening Toolkit, UNCTAD, and other organizations specialized on the topic of biofuels;

   e. Inviting Member States to share any new information and knowledge of sustainable biofuels technology to work towards sustainable development;

   f. Ensuring that the database will be available in every official UN language, and translated into other Member State languages upon request;

2. Recommends the empowerment of the Trade Capacity-Building Branch of UNIDO's Programme Development and Technical Cooperation Division to facilitate the international harmonization of biofuel standards and regulatory apparatuses and that it operates pursuant to the objectives of:
a. The development of a shared international set of metrics for the measurement of biofuel products inter alia:

   i. Fuel classification;
   ii. Chemical composition;
   iii. Standard units of storage;
   iv. Standard units of account;
   v. Conversion to Gas Gallon Equivalents;
   vi. Feedstock origin;
   vii. Refinery process;

b. The development of an internationally accepted system for determining the degree of sustainability associated with both the production of physical biofuel products as well as domestic and foreign direct investment in biofuel capital projects by assessing:

   i. Net greenhouse gas emissions;
   ii. Land productivity and resource use efficiency;
   iii. Gender considerations;
   iv. Labor conditions and human health;
   v. Biodiversity;
   vi. Water and soil protection;
   vii. Food security;
   viii. Land tenure;

3. Calls upon Member States to further develop the Biofuel Screening Toolkit to update the international database for biofuels with new-found research, implement projects that correspond to that research in developing states, and also assist in the evaluation of biofuel projects to assess the economic, social and environmental sustainability by:

   a. Suggesting areas for further assistance in the biofuel projects dependent on each individuals state’s need;
   b. Using the Biofuel Screening Toolkit’s ‘traffic light’ approach of risk management to investigate and resolve any adverse impacts that biofuel production may have, and to ensure biofuel projects are sustainable;

4. Asks the UNIDO Institute for Capacity Development to continue the international community's understanding of biofuel production through research projects directed specifically towards the environmental and economic impact of different uses of biofuels through, inter alia:

   a. Agricultural Development and Food Production;
   b. Land Use in both Urban and Rural Development;
   c. Mass Transportation Systems;

5. Calls upon the UNIDO, Member States, and private actors in the biofuel industry to collaborate on Public Private Partnerships (PPP) that will enhance smallholder farmers’ access to biofuel supply chains, financial investments, and technologies through:

   a. Expanding UNIDO’s PPP efforts so that they include initiatives that focus on increasing the access of sustainable biofuel supply chains for smallholders and through it contribute to capacity building, similar to UNIDO’s PPP with the Global Social Compliance Programme (GDCP);
   b. Recommending Member States to create a legal framework that allows for effective PPPs that facilitate fair risk allocation between public and private actors;
c. Suggesting private sectors to direct more investments and research towards enhancing the sustainability and profitability of biofuels as well as sharing the research on the international database of biofuels mentioned in Clause 1;

6. **Endorses** the implementation of a sustainable development goal of fossil fuels and biofuels in a flowing market of full integration by 2029, ensuring the coexistence of biofuels and fossil fuels in order to uphold a stable economic transition into the use of new technologies to assure a stable, more diverse market by:

a. Maintaining exports and imports with member states;

b. Diversifying the industrial options in oil producing and consuming states into sectors associated with the refinement, distribution and sale of energy products as well as the manufacture of related products;

7. **Requests** that the Trade Capacity-Building Branch work to extend and maintain international cooperation among all its constituents for the development, employment, and trade of sustainable biofuels by promoting the extension of technical facilities to those states that have been hitherto uninvolved in the biofuel market by conducting studies, creating recommendations, collecting expert opinions, and communicating those items to relevant stakeholders in the international energy market, inter alia:

a. Net biofuel producers and consumers;

b. Fossil Fuel producers;

c. Market exchanges;

d. Capital markets;

e. Relevant organs of the United Nations including UNCTAD, Economic and Social Council (ECOSOC), United Nations Environment Programme, FAO, United Nations Development Programme;

8. **Encourages** oil-producing member states to begin the process of implementing biofuel technologies in creating job opportunities, diversifying and stimulating the economy, and progress into green economic technologies, as seen in programs such as:

a. Alcoholes del Uruguay (ALUR);

b. Saudi Arabia Biorefinery from Algae;

c. Global Bioenergies;

9. **Requests** that net exporters of biofuels assist oil producing and single-commodity dependent states in the transition to using and producing biofuels by, inter alia:

a. Implementing retraining programs for workers in traditional energy sectors to avoid structural unemployment;

b. Providing means of technology and data sharing;

c. Assisting in building infrastructure and enhancing capacity;

10. **Recommends** the UNIDO Institute for Capacity Development provide Member States with the institutional support necessary to develop biofuel production projects through, as outlined in UNIDO's International Technology Center programs, which are responsible for:
a. Stimulating applications of sustainable energy technologies;

b. Establishing joint research initiatives between UNIDO and Member States;

c. Building extensive networks of associated local experts in energy technology;

d. Providing training opportunities in new technologies to catalyze industries and create jobs;

11. **Calls upon** UNIDO and Member States to further promote national programs and improvement of Member States’ investment climate to facilitate and encourage sustainable biofuel investments in developing states and their agricultural sector by building upon existing capacities and mechanisms, such as the Subcontracting and Partnership Exchange (SPX) as well as the Clean Development Mechanism (CDM) within the United Nations Framework Convention on Climate Change (UNFCCC), through:

a. Enhancing UNIDO’s matchmaking platform, through inviting greater participation of the private sector in networking conferences of the Climate Technology Centre and Network to facilitate the process of bringing together investors to develop biofuels and transfer technologies to developing nations;

b. Inviting those companies to consider, with the goal of catalysing their involvement in local communities, to subscribe to the United Nations Global Compact as a Corporate Social Responsibility framework to publically express their commitment to sustainable development;

12. **Requests** the Partnership for Vehicle and Fuel Technology Management to establish partnerships with SMEs wherever possible and adequate in order to facilitate the transition between fossil fuel and biofuel usage, through the use of fuel blending initiatives for energy consumption through:

a. Setting benchmarks and timelines to adapt blending percentages of fossil fuels and biofuels, to be determined by individual Member States;

b. Evaluating individual Member States' progress in accordance with their ability to meet the benchmarks;

13. **Encourages** the participation of SMEs in the smooth transition between fossil fuel and biofuel usage, through the use of fuel blending initiatives for energy consumption;

14. **Recommends** that businesses in Member States adopt UNIDO’s Computer Model for Feasibility Analysis and Reporting software as a guide to efficiently and smoothly achieve profit maximization for those who wish to enter the biofuel industry;

15. **Encourages** the initiation of dialogue between states active in both traditional and emerging energy markets at an annual UNIDO General Conference forum that confirms a mutual consensus of sustainable development by fostering a competitive and stable market for both traditional and emerging sources of energy;

16. **Requests** that the Subcontracting and Partnership Exchange, with the assistance of UNIDO, open up trade investment options to non-member states;

17. **Invites** UNIDO, through the Program Support and General Management Division to consider establishing a development assistance program to ensure developing Member States and single commodity dependent producers have the means to implement biofuel production projects;

18. **Encourages** the continuation of incentives, such as the Roundtable on Sustainable Biomaterials’ membership for organizations working towards sustainability of biomaterials, for the private sector to share research on biofuels technology and contribute to sustainable development;
19. Suggests increased capital investments in energy projects originate a diverse array of private, public and institutional sources;

20. Requests more transparency in governmental regulation of biofuels in order to ensure that biofuel development is consistent with their development strategy and with the necessities of their people.

21. Recommends that industrialized states should reduce trade regulations for biofuels;

22. Further suggests that the Economic and Social Council and/or the World Trade Organization discuss the opening and limiting trade barriers concerning biofuels.
The United Nations Industrial Development Organization,

Deeply concerned that continued reliance on fossil fuels is incompatible with long-term sustainability based on scientific research and findings regarding the environmental impact of the use of fossil fuels as an energy source, Guided by and commending emerging research, both academic and business driven, regarding fourth generation biofuels, such as that conducted by the scientific journal Chemik International, and their potential as a sustainable fuel source which would not threaten local ecologies, while also functioning as an efficient, renewable energy source,

Recalling the Millennium Summit at which world leaders made a commitment to certain targets via the eight Millennium Development Goals (MDGs), with MDGs 1 and 7 being of utmost relevance to the sustainable development of biofuels,

Confident that the use of fourth generation biofuels speak to the theme of environmental sustainability while also addressing the issues of hunger and poverty as fourth generation biofuel production does not consume local land or water resources unlike other fuel sources that contribute to food scarcity, as outlined by the Perspectives for Global Development of Biofuel Technologies to 2050,

Believing that cyanobacteria as a biofuel can address the concerns raised under MDG 1 as the gradual move towards fourth generation biofuels would enable countries to move away from processes that contribute to hunger and poverty by perpetuating food scarcity;

Deeply conscious of the economy of scale nature of biofuel production, the high initial development and opportunity costs,

Noting with approval the limited attention that fourth generation biofuels have received in the international community due to high research costs,

Noting further current innovation and development in fourth generation technologies and production processes within both the private and public sectors,

Reaffirming the necessity of incorporating developing states into advanced biofuel production processes,

Bearing in mind that a one-size-fits-all approach is neither viable nor realistic given the individualized needs, weaknesses, and strengths of countries,

Emphasizing United Nation Industrial Development Organization’s approach to development as a whole and its history with intergovernmental organizations and private sector cooperation,

1. Recommends that Member States consider increasing the role of biofuels as a national energy source;

2. Calls for the development of fourth generation biofuels, particularly cyanobacteria, in order to enable the reduction of inorganic carbon (CO₂) in the atmosphere due to its photosynthetic, carbon fixation properties;

3. Supports extensive research and development into fourth generation biofuels, particularly cyanobacteria, and their production processes, with a focus on achieving mass-production while maintaining their environmental integrity with the goal of disseminating fourth generation biofuel technologies and production processes throughout the international system;
4. **Emphasizes** the need for an approach to MDG implementation regarding fourth generation biofuel production ranging from 25 to 35 years in order to account for the need for further research and development and the necessity for gradual change in energy source use;

5. **Encourages** developed states with available resources to support existing innovation and development of fourth generation biofuel production processes, technologies, and relevant research using:
   a. Current relevant research and literature on third generation biofuels;
   b. Current relevant research on genetically modified organisms (GMOs) as a base for addressing genetic engineering within cyanobacteria;

6. **Expresses its hope** that given the possibility of high environmental and economic returns on fourth generation biofuels, developed states and corporations will be incentivized to invest in this emerging sector;

7. **Further recommends** North-South cooperation with regards to fourth generation biofuels given the necessity of integrating smaller developing states into these production processes;

8. **Encourages** developed Member States to support investment in fourth generation biofuels via subsidies similar to those currently being employed for first, second, and third generation biofuel production processes;

9. **Further invites** gradually shifting investment in the biofuel sector towards fourth generation technologies once substantive research and development has been established by advanced countries due to the high initial development costs;

10. **Emphasizes** the need for gradual transition into energy reliance on fourth generation biofuels due to the obstacles of restructuring production processes and relevant frameworks;

11. The United Nation’s Green Cooperation Volunteers initiative as both a model and prospective tool for implementing fourth generation biofuel technology once production processes and technologies have been developed extensively so as to ensure cost and environmental efficiency;

12. **Requests** the General Conference to consider the creation of a commission under the UNIDO which would oversee research and development led by advanced countries and work with academic experts on biofuels in order to create region-tailored strategies and policies with regards to the importation of fourth generation technologies into developing states primarily, with tasks to include:
   a. The creation of national strategy plans addressing sustainable biofuel production given the differences in states’ capabilities and access to resources;
   b. Hold round tables modeled on those used by Germany within their National Strategy for Corporate Social Responsibility as forums in which local strategy plans would be developed and information would be exchanged among local bodies as well as international structures;
   c. Recommends annual commission reports outlining the latest peer-reviewed findings regarding fourth generation biofuels and their environmental and economic viability;

13. ** Recommends** developed Member States to introduce research exchange programs to facilitate north-south cooperation in the sustainable development of biofuels, the enhancement of these research exchange programs may entail:
   a. Forming a public database of opportunities for funding and exchanges that researchers and students;
   b. Scholarships for students and postdoctoral researchers to participate in exchanges;
   c. Awards for faculty members of universities to teach abroad;
   d. Research stipends for those conducting research in developing countries;

14. **Encouraging** Public Private Partnerships (PPPs) to further research and develop fourth generation biofuels through competitions such as the Green Talent Competition for the purpose of driving innovation within this sector.