



# NMUN • LATIN AMERICA

## GALAPAGOS 2013

### COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT BACKGROUND GUIDE 2013

Written By: María Luisa Ortega, Director; Nicholas Gachet, Assistant Director



# NMUN • LATIN AMERICA

[nmun.org/nmun\\_latinamerica13.html](http://nmun.org/nmun_latinamerica13.html)

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## **Message from the Secretary-General Regarding Position Papers for the 2013 NMUN-LatAm Conference**

At the 2013 NMUN-LatAm Conference, each delegation submits one position paper for each committee assignment. Delegates should be aware that their role in each committee impacts the way a position paper should be written. While most delegates will serve as representatives of Member States, some may also serve as NGOs. To understand these fine differences, please refer to the Delegate Preparation Guide.

Position papers should provide a concise review of each delegation's policy regarding the topic areas under discussion and establish precise policies and recommendations in regard to the topics before the committee. International and regional conventions, treaties, declarations, resolutions, and programs of action of relevance to the policy of your State should be identified and addressed. Making recommendations for action by your committee should also be considered. Position papers also serve as a blueprint for individual delegates to remember their country's position throughout the course of the Conference. NGO position papers should be constructed in the same fashion as position papers of countries. Each topic should be addressed briefly in a succinct policy statement representing the relevant views of your assigned NGO. You should also include recommendations for action to be taken by your committee. It will be judged using the same criteria as all country position papers, and is held to the same standard of timeliness.

Please be forewarned, delegates must turn in material that is entirely original. NMUN/NCCA will not tolerate the occurrence of plagiarism. In this regard, the NMUN Secretariat would like to take this opportunity to remind delegates that although United Nations documentation is considered within the public domain, the Conference does not allow the verbatim re-creation of these documents. This plagiarism policy also extends to the written work of the Secretariat contained within the Committee Background Guides. Violation of this policy will be immediately reported to faculty advisors and may result in dismissal from Conference participation. Delegates should report any incidents of plagiarism to the Secretariat.

Delegation's position papers can be awarded as recognition of outstanding pre-Conference preparation. In order to be considered for a Position Paper Award, delegations must have met the formal requirements listed below. Please refer to the sample position paper below this message for a visual example of what your work should look like at its completion. All papers must be typed and formatted in the same manner as this example. The following format specifications are required for all papers:

- Length must not exceed two single-sided pages (use standard size for your home region: A4 or 8.5x11).
- Margins must be set at 1 inch for the whole paper.
- Font must be Times New Roman sized between 10 pt. and 12 pt.
- Body of the paper must be single-spaced.
- Country/NGO name, school name, and committee name must be clearly labeled on the first page.
- Agenda topics must be clearly labeled in separate sections.
- National symbols (headers, flags, etc.) are deemed inappropriate for NMUN position papers.

To be considered for awards, position papers need to be submitted by e-mail in .pdf or .doc formats by 1 December 2012. As proof of submission, include yourself as an e-mail recipient. Please use the committee name, your assignment, and delegation/school name in both the e-mail subject line and in the filename (example: CSustD\_Cuba\_Mars College).

1. Send one complete set of all position papers for each of your country/NGO assignments to the Secretary-General at [secgen.latam@nmun.org](mailto:secgen.latam@nmun.org).
2. Send a copy of your position paper for each assigned committee to the corresponding committee e-mail address listed below. Please note, the e-mail addresses will be active on 1 October 2012.

Committee	E-mail Address (after 1 Octt.)
Commission on Population and Development (CPD)	<a href="mailto:cpd.latam@nmun.org">cpd.latam@nmun.org</a>
Commission on Science and Technology for Development (CSTD)	<a href="mailto:cstd.latam@nmun.org">cstd.latam@nmun.org</a>
Commission on Sustainable Development (CSustD)	<a href="mailto:csustd.latam@nmun.org">csustd.latam@nmun.org</a>
Commission on the Status of Women (CSW)	<a href="mailto:csw.latam@nmun.org">csw.latam@nmun.org</a>
Security Council (SC)	<a href="mailto:sc.latam@nmun.org">sc.latam@nmun.org</a>

Once the formal requirements outlined above are met, Conference staff use the following criteria to evaluate Position Papers:

- Overall quality of writing, proper style, grammar, etc.
- Citation of relevant resolutions/documents.
- General consistency with bloc/geopolitical constraints.
- Consistency with the constraints of the United Nations.
- Analysis of issues, rather than reiteration of the Committee Background Guide.
- Outline of official policy aims within the committee's mandate.

Should you have any questions please feel free to contact the Conference staff.

Sincerely,

Nicole Galindo  
Secretary-General  
NMUN-LatAm

## Sample Position Paper

The following position paper is designed to be a sample of the standard format that an NMUN position paper should follow. Papers may be no longer than two single-sided pages. Only the first two pages of any submissions will be considered for awards.

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*Delegation from*  
**Canada**

*Represented by*  
**University of Jupiter**

### *Position Paper for General Assembly Plenary*

The topics before the General Assembly Plenary are: Breaking the Link between Diamonds and Armed Conflict; the Promotion of Alternative Sources of Energy; and the Implementation of the 2001-2010 International Decade to Roll Back Malaria in Developing Countries, Particularly in Africa. Canada is dedicated to collaborative multilateral approaches to ensuring protection and promotion of human security and advancement of sustainable development.

#### **I. Breaking the Link between Diamonds and Armed Conflict**

Canada endorses the Kimberly Process in promoting accountability, transparency, and effective governmental regulation of trade in rough diamonds. We believe the Kimberly Process Certification Scheme (KPCS) is an essential international regulatory mechanism and encourage all Member States to contribute to market accountability by seeking membership, participation, and compliance with its mandate. Canada urges Member States to follow the recommendations of the 2007 Kimberley Process Communiqué to strengthen government oversight of rough diamond trading and manufacturing by developing domestic legal frameworks similar to the Extractive Industries Transparency Initiative. We call upon participating States to act in accordance with the KPCS's comprehensive and credible systems of peer review to monitor the continued implementation of the Kimberley Process and ensure full transparency and self-examination of domestic diamond industries. We draw attention to our domestic programs for diamond regulation including Implementing the Export and Import of Rough Diamonds Act and urge Member States to consider these programs in developing the type of domestic regulatory frameworks called for in A/RES/55/56. Canada recognizes the crucial role of non-governmental organizations (NGOs) in the review of rough diamond control measures developed through the Kimberly Process and encourages States to include NGOs, such as Global Witness and Partnership Africa Canada, in the review processes called for in A/RES/58/290. We urge Member States to act in accordance with A/RES/60/182 to optimize the beneficial development impact of artisanal and alluvial diamond miners by establishing a coordinating mechanism for financial and technical assistance through the Working Group of the Kimberly Process of Artisanal Alluvial Producers. Canada calls upon States and NGOs to provide basic educational material regarding diamond valuation and market prices for artisanal diggers, as recommended by the Diamond Development Initiative. Canada will continue to adhere to the 2007 Brussels Declaration on Internal Controls of Participants and is dedicated to ensuring accountability, transparency, and effective regulation of the rough diamond trade through the utilization of voluntary peer review systems and the promotion of increased measures of internal control within all diamond producing States.

#### **II. The Promotion of Alternative Sources of Energy**

Canada is dedicated to integrating alternative energy sources into climate change frameworks by diversifying the energy market while improving competitiveness in a sustainable economy, as exemplified through our Turning Corners Report and Project Green climate strategies. We view the international commitment to the promotion of alternative sources of energy called for in the Kyoto Protocol and the United Nations Framework Convention on Climate Control (UNFCCC) as a catalyst to sustainable development and emission reduction. Canada fulfills its obligations to Article 4 of the UNFCCC by continuing to provide development assistance through the Climate Change Development Fund and calls upon Member States to commit substantial financial and technical investment toward the transfer of sustainable energy technologies and clean energy mechanisms to developing States. We emphasize the need for Member States to follow the recommendations of the 2005 Beijing International Renewable Energy Conference to strengthen domestic policy frameworks to promote clean energy technologies. Canada views dissemination of technology information called for in the 2007 Group of Eight Growth and Responsibility in the World Economy Declaration as a vital step in energy diversification from conventional energy generation. We call

upon Member States to integrate clean electricity from renewable sources into their domestic energy sector by employing investment campaigns similar to our \$1.48 billion initiative ecoENERGY for Renewable Power. Canada encourages States to develop domestic policies of energy efficiency, utilizing regulatory and financing frameworks to accelerate the deployment of clean low-emitting technologies. We call upon Member States to provide knowledge-based advisory services for expanding access to energy in order to fulfill their commitments to Goal 1 of the Millennium Development Goals (MDGs). Canada urges States to address the concerns of the 2007 Human Development Report by promoting tax incentives, similar to the Capital Cost Allowances and Canadian Renewable and Conservation Expenses, to encourage private sector development of energy conservation and renewable energy projects. As a member of the Renewable Energy and Energy Efficiency Partnership, Canada is committed to accelerating the development of renewable energy projects, information sharing mechanisms, and energy efficient systems through the voluntary carbon offset system. We are dedicated to leading international efforts toward the development and sharing of best practices on clean energy technologies and highlight our release of the Renewable Energy Technologies Screen software for public and private stakeholders developing projects in energy efficiency, cogeneration, and renewable energy. Canada believes the integration of clean energy into State specific strategies called for in A/62/419/Add.9 will strengthen energy diversification, promote the use of cogeneration, and achieve a synergy between promoting alternative energy while allowing for competitiveness in a sustainable economy.

### **III. Implementation of the 2001-2010 International Decade to Roll Back Malaria in Developing Countries, Particularly in Africa**

Canada views the full implementation of the treatment and prevention targets of the 2001-2010 International Decade to Roll Back Malaria in Developing Countries, Especially in Africa, as essential to eradicating malaria and assisting African States to achieve Target 8 of Goal 6 of the MDGs by 2015. We recommend Member States cooperate with the World Health Organization to ensure transparency in the collection of statistical information for Indicators 21 and 22 of the MDGs. Canada reaffirms the targets of the Abuja Declaration Plan of Action stressing regional cooperation in the implementation, monitoring, and management of malaria prevention and treatment initiatives in Africa. To fully implement A/RES/61/228, Canada believes developed States must balance trade and intellectual property obligations with the humanitarian objective of the Doha Declaration on the TRIPS Agreement and Public Health. We continue to implement Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health into our compulsory licensing framework through the Jean Chrétien Pledge to Africa Act. We urge Member States to support compulsory licensing for essential generic medicines by including anti-malarial vaccines and initiating domestic provisions to permit export-only compulsory licenses to domestic pharmaceutical manufacturers, similar to Canada's Access to Medicines Regime. Canada calls upon Member States to establish advanced market commitments on the distribution of pneumococcal vaccines to developing States in cooperation with PATH and the Malaria Vaccine Initiative. We emphasize the need for greater membership in the Roll Back Malaria initiative to strengthen malaria control planning, funding, implementation, and evaluation by promoting increased investment in healthcare systems and greater incorporation of malaria control into all relevant multi-sector activities. Canada continues to implement the Canadian International Development Agency's (CIDA) New Agenda for Action on Health to reduce malaria infection rates among marginalized populations in Africa, increase routine immunizations rates, and reduce infection rates of other neglected infections. Canada will achieve the goal of doubling aid to Africa by 2008-2009 by providing assistance to the Global Fund to Fight Aids, Tuberculosis, and Malaria. We urge Member States to increase donations to intergovernmental organizations and NGOs that support malaria programming in Africa, exemplified by CIDA's contribution of \$26 million to the Canadian Red Cross. We continue our efforts to provide accessible and affordable vector control methods to African States through the Red Cross' Malaria Bed Net Campaign and the African Medical Research Foundation Canada by supplying insecticide-treated mosquito nets and Participatory Malaria Prevention and Treatment tool kits.



Dear Delegates,

It is our immense pleasure to welcome you to the 2013 National Model United Nations Latin America Conference. With an impressive roster of universities and institutions in attendance, an array of intriguing topics, and a unique location in the Galapagos Islands, this year promises to be truly memorable. You and your team are integral in making the 2013 NMUN LatAm Conference historic.

Your Director for the Commission on Science and Technology (CSTD) is María Luisa Ortega. María Luisa holds a MA degree in International Relations with a focus in Security and Human Rights. Currently, she is working as an Advisor to the Ministry of Higher Education in Ecuador and teaches IR at college level. This conference marks Maria Luisa's fourth year on NMUN staff. Nicholas Gachet is your Assistant Director. He is currently majoring in Economics and International Relations at Universidad San Francisco de Quito. He has worked in macroeconomic statistics publications for the public sector of Ecuador.

The agenda topics for discussions this year are as follows:

1. South-South Cooperation for the Advancement of Science and Technology Transfer in Developing Countries
2. Improved Access to Renewable Energy Technologies as a Means for Achieving Sustainable Development

The Commission on Science and Technology for Development (CSTD) is a subsidiary body of the Economic and Social Council (ECOSOC). Since 2006, the Commission has been mandated by ECOSOC to serve as the focal point in the system-wide follow-up to the outcomes of the World Summit on the Information Society (WSIS) and advise the Council thereon, including through the elaboration of recommendations to the Council aimed at furthering the implementation of the Summit outcomes. Among other tasks, the CSTD shares best and effective practices and lessons learned and identifies obstacles and constraints encountered, actions and initiatives to overcome them and important measures for further implementation of the Summit outcomes.

The background guide herein will serve as a brief introduction to the topics listed but cannot replace substantive research of your own. Use it as a springboard for a deep analysis into each topic so that your delegation is empowered to harness the Commission on Science and Technology for Development venue to engender greater prospects for international development.

Each delegation must submit a position paper that identifies its viewpoints on the agenda topics. NMUN will accept position papers via e-mail by December 01, 2012. Please refer to the background guide for a message from your Secretary-General explaining the NMUN position paper requirements and restrictions. Delegates' adherence to these guidelines is crucial. NMUN can be one of the most rewarding academic experiences of your college career. We hope that this year's Conference will not only intrigue you to participate again, but also that you find it as beneficial as we have.

If you have any questions regarding your preparation, please feel free to contact the Director of the Security Council or the Secretary-General, Nicole Galindo. Good luck in your preparation for the conference. We look forward to seeing you in January!

Sincerely,

Maria Luisa Ortega  
Director

Nicholas Gachet  
Assistant Director

# History of the Commission on Science and Technology for Development

## *Institutional Background*

The Commission on Science and Technology for Development (CSTD) is a subsidiary body of the Economic and Social Council (ECOSOC). It was established in 1992 to provide the General Assembly (GA) and the Economic and Social Council with high-level advice on issues related to the advancement of science and technology in developing countries, the development of renewable energy technologies, improved access to energy services, energy security, climate change, the appropriate utilization of information technologies, among others.<sup>1</sup>

The CSTD met for the first time in April 1993 in New York at the United Nations headquarters.<sup>2</sup> Since then, the Commission meets annually in Geneva for a period of one week according to what has been stipulated in ECOSOC Resolution 2002/37 and reaffirmed in draft Council Resolution 2003/31 of June 4<sup>th</sup> 2003.<sup>3</sup> Starting July 1993, the United Nations Conference on Trade and Development (UNCTAD) Secretariat has been responsible for the substantive servicing.

## *Mandate and Related Objectives*

The CSTD's core mandate is to provide the GA and the ECOSOC with appropriate policy recommendations, and suitable options in order to enable such organs to guide the future work of the United Nations; develop common policies and agreed on proper actions on the modernization and improvement of research, science, and technology transfer; the formulation of guidelines regarding geospatial analysis and communication technology; the development of innovation energy police reviews; the delineation of wide-reaching strategies for spreading the diffusion of renewable energy sources globally; among others.<sup>4</sup> Since 2006, the Commission is also required by the ECOSOC to serve and assist its Member States as the focal point in the system-wide follow-up to the outcomes of the World Summit on the Information Society (WSIS).<sup>5</sup> The CSTD is asked to advise the Council through the formulation of suitable recommendations aimed at furthering the implementation of the Summit outcomes.<sup>6</sup> To that end, the Commission reviews and assesses progress at the international and regional levels in the implementation of action lines and commitments contained in the outcome documents of the Summit; shares best practices and lessons learned identifying obstacles and constraints, and promotes initiatives to overcome them. It also endorses dialogue and advances partnerships in coordination with other appropriate UN programs and specialized and furthers the achievement of internationally agreed development goals with the participation of governments, the private sector, civil society, the UN and other international organizations.<sup>7</sup>

Regarding science and technology issues, the CSTD is mandated to operate as a forum for the examination of science and technology matters and their implications for development; the improvement of general understanding on science and technology policies particularly in respect of developing Member States; and the continuous formulation of guidelines and suggestions on science and technology subjects within the UN system.<sup>8</sup>

## *The CSTD in Action*

Since its establishment, the CSTD has worked to enhance economic and social development and competitiveness in developing countries through the advancement of science and technology, including improved access to renewable sources of energy, sustainable use of information and communication technologies, the formulation of development-oriented policies for a socio-economic inclusive information society, and the endorsement of capacity-building at the local level, beyond others.<sup>9</sup> The Commission aims to achieve the latter through systematic research on such topics, intergovernmental policy dialogue and the execution of technical cooperation, and training initiatives.<sup>10</sup> In this

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<sup>1</sup> United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. 2012.

<sup>2</sup> United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. 2010.

<sup>3</sup> United Nations Conference on Trade and Development. *Mandate and Institutional Background*. 2012.

<sup>4</sup> United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. 2012.

<sup>5</sup> United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. 2012.

<sup>6</sup> United Nations Conference on Trade and Development. *Mandate and Institutional Background*. 2012.

<sup>7</sup> United Nations Conference on Trade and Development. *Mandate and Institutional Background*. 2012.

<sup>8</sup> United Nations Conference on Trade and Development. *Mandate and Institutional Background*. 2012.

<sup>9</sup> United Nations Conference on Trade and Development. *Technology, Innovation and Trade Logistics*. 2012.

<sup>10</sup> United Nations Conference on Trade and Development. *Technology, Innovation and Trade Logistics*. 2012.

regard, the CSTD has undertaken action in many countries like the Dominican Republic, Gabon, Ghana, Angola, Lesotho, Mauritania, etc. In 2007, the Commission selected “New and emerging technologies for development” as its priority theme for the 2009–2011 biennium.<sup>11</sup> In line with the World Summit Outcome, the CSTD resolute to observe the role of renewable energy technologies in attaining the Millennium Development Goals (MDGs) and other internationally agreed targets. Moreover, the documents and reports put together by the CSTD include, but are not limited to, science and technology for basic needs and for realizing sustainable human development, the advancement of science and technology for achieving integrated land management, amongst others.

### ***Membership of the CSTD***

The Commission is composed of 43 Member States elected by the ECOSOC for a term of four years.<sup>12</sup> Such 43 Member States are geographically divided as follows: eleven from Africa; nine from Asia; eight from Latin American and the Caribbean; five from Eastern Europe; and ten from Western Europe.<sup>13</sup> At each session, the Commission elects a new Bureau – a chairperson and four vice-chairpersons – for the next session. The Bureau assumes responsibilities for the forthcoming activities during the inter-session period.<sup>14</sup>

### ***The CSTD and other intergovernmental bodies***

As the focal point for the treatment of science and technology for development, the CSTD interacts and cooperates with a variety of other organizations within the UN System. The Commission works closely with the United Nations Development Program (UNDP) and other UN regional entities on a project-by-project basis, and via combined workshops, seminars and multilateral technical assistance initiatives.<sup>15</sup> The CSTD has also undertaken joint action with the World Bank (WB) and the International Monetary Fund (IMF). Both the WB and the CSTD have worked in the delivery of technical assistance and capacity-building programs in developing countries such as India, Brazil, Chile, Egypt, El Salvador, Uruguay, Thailand, among others. Besides, the WB and the IMF have collaborated with the Commission in organizing conferences, colloquiums, roundtables, and inter-institutional and intergovernmental meetings on topics related to the production and diffusion of renewable energy technologies and its linkage with sustainable development; transfer of technology from industrialized countries to developing ones; promoting new labor opportunities for the Arab World, mainstreaming gender and student learning, developing partnerships for achieving universal primary education, diversification of energy sources, etc.<sup>16</sup>

Furthermore, the UNCTAD – as the body responsible for the substance servicing of the CSTD – has united forces with the World Trade Organization (WTO) to ensure a better functioning of the multilateral trading system. In April 2003, the UNCTAD and the WTO signed a Memorandum of Understanding providing for cooperation and consultations on their technical assistance activities and for the conduct of combined studies on selected issues.<sup>17</sup>

### ***Conclusion***

As highlighted by the United Nations Secretary-General, intergovernmental forums, such as the CSTD, should perform as platforms for the sharing of good practices, and for promoting North–South and South–South partnerships.<sup>18</sup> In-depth research assumed by the CSTD Member States should provide useful insights for promoting renewable energy technologies for development, at the same time as endorsing local, regional and international cooperation.<sup>19</sup> In this regard, governments are also encouraged to allow for the findings of the Commission and undertake transparent actions including mainstreaming science and technology promotion and investment into their national development plans; formulating and implementing policies aimed at strengthening science education thus

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<sup>11</sup> Economic and Social Council (E/CN.16/2010/4). *New and emerging technologies: renewable energy for development. Report of the Secretary-General*. 2010.

<sup>12</sup> United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. 2012.

<sup>13</sup> United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. 2012.

<sup>14</sup> United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. 2012.

<sup>15</sup> United Nations Conference on Trade and Development. *Relationship with other agencies*. 2012.

<sup>16</sup> United Nations Conference on Trade and Development. *Relationship with other agencies*. 2012.

<sup>17</sup> United Nations Conference on Trade and Development. *Relationship with other agencies*. 2012.

<sup>18</sup> Economic and Social Council (E/CN.16/2010/4)/Commission on Science and Technology for Development. *New and emerging technologies: renewable energy for development. Report of the Secretary-General*. 2010.

<sup>19</sup> Economic and Social Council (E/CN.16/2010/4)/Commission on Science and Technology for Development. *New and emerging technologies: renewable energy for development. Report of the Secretary-General*. 2010.



providing suitable working conditions for their scientific and engineering talent, and upholding research in scientific and technological fields.<sup>20</sup> Moreover, the CSTD must endorse its role as the main linkage between the private sector, academia, and financial institutions in fostering entrepreneurship, and establishing international needs-based partnerships where governments and the private sector can collaborate on addressing local development challenges, especially those related to health, agriculture, sustainable use of natural resources and environmental management.<sup>21</sup>

Nevertheless, the biggest challenge facing the CSTD is the establishment of a culture of innovation supporting Member States' in the development of their own capabilities in science and technology combined with their existing knowledge resources.<sup>22</sup> The CSTD is therefore encouraged to play the role of a torchbearer for national governments to integrate science, technology and innovation into their local development strategies.<sup>23</sup> The Commission's main task is to serve as an inclusive forum for developing countries, the international community, the science and technology research society, and other interested parties to share and analyze empirical evidence on technological earning and its impact at the domestic level; and assist national efforts – when facing a low level of science and innovation capacity – on building local scientific and technical capacities while utilizing existing knowledge resources in order to generate socio-economic development and national wealth.<sup>24</sup>

## Annotated Bibliography

### *History of the Commission on Science and Technology for Development*

Commission on Science and Technology for Development - Report of the Secretary General. (2010). *New and emerging technologies: renewable energy for development*. Retrieved June 26, 2012 from [http://unctad.org/en/Docs/ecn162010d4\\_en.pdf](http://unctad.org/en/Docs/ecn162010d4_en.pdf)

*This report is an outcome document of the Thirteenth Session of the CSTD held in Geneva, in 2010. It seeks to identify means to overcome the challenges related to the deployment and scaling-up of new and emerging renewable energy technologies in developing countries. The document upholds improved access to energy services as of crucial importance to achieving the Millennium Development Goals, and affirms the need to enhance energy security through diversification of energy supply, taking into account concerns about climate change. The report is an important source for delegates since it includes relevant information on energy challenges and development nowadays, new and emerging RETs, and alternative ways for overcoming the challenges the deployment of RETs in developing countries.*

United Nations Conference on Trade and Development (2010). *Science and Technology for Development*. Retrieved June 28, 2012 from <http://www.unctad.info/en/Science-and-Technology-for-Development---StDev/>

*The above-mentioned web site represents a primary gateway to the UN System information on science and technology for development. It includes a complete section on news regarding the development and outcomes of the latest sessions of the CSTD, as well, as its inter-sessional panels and the ECOSOC Bureau Meetings. The web also encompasses detailed information on past, current and future events of the CSTD and quick links to important ECOSOC and GA resolutions related to science and technology, and important documents and figures like the Digital Divide: ICT Development Indices and the ICT benchmarking tool. The site is an important source for delegates starting its research on the basics of the CSTD, its functioning, mandate, annual sessions, recommendations and analysis, beyond other important topics.*

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<sup>20</sup> Economic and Social Council (E/CN.16/2010/4)/Commission on Science and Technology for Development. *New and emerging technologies: renewable energy for development. Report of the Secretary-General*. 2010.

<sup>21</sup> Economic and Social Council (E/CN.16/2010/4)/Commission on Science and Technology for Development. *New and emerging technologies: renewable energy for development. Report of the Secretary-General*. 2010.

<sup>22</sup> Economic and Social Council (E/CN.16/2010/4)/Commission on Science and Technology for Development. *New and emerging technologies: renewable energy for development. Report of the Secretary-General*. 2010.

<sup>23</sup> Economic and Social Council (E/CN.16/2010/4)/Commission on Science and Technology for Development. *New and emerging technologies: renewable energy for development. Report of the Secretary-General*. 2010.

<sup>24</sup> Economic and Social Council (E/CN.16/2010/4)/Commission on Science and Technology for Development. *New and emerging technologies: renewable energy for development. Report of the Secretary-General*. 2010.

United Nations Conference on Trade and Development (2012). *Commission on Science and Technology for Development*. Retrieved June 28, 2012 from <http://unctad.org/en/Pages/cstd/cstd.aspx>

*This site is a particularly important first entry for delegates in identifying the main objectives, tasks, mandate and institutional background of the CSTD, as well as its membership, and bureau. The web also provides delegates with direct links to useful and overarching documents such as CSTD-ECOSOC Decisions; ECOSOC Resolutions related to the promotion of Science and Technology for Development; ECOSOC Resolutions related to renewable energies and transfer of technology; outcome reports on the intersessional panel meetings; summaries of the CSTD latest meetings, among other documents pertaining the formulation of public policy for attaining sustainable development.*

United Nations Conference on Trade and Development. (2012). *Relationship with other agencies*. Retrieved June 28, 2012 from <http://unctad.org/en/Pages/About%20UNCTAD/Relationship-with-other-agencies.aspx>

*This web site presents basic information on the integrated treatment of science, trade and sustainable development within and outside the UN system. The web outlines different means of cooperation and interaction between the UNCTAD and the CSTD, and other international organizations such as the World Trade Organization, the International Trade Center, UN Regional Commissions, and the UNDP, among others. It also provides delegates with information on the work of the UN Inter-Agency Cluster on Trade and Productivity Capacity, its main functions and membership; as well as, the joint initiatives undertaken by the World Bank and UNCTAD in order to deliver technical assistance and capacity-building programs to developing countries.*

## **I. South-South Cooperation for the Advancement of Science and Technology Transfer in Developing Countries**

*“On this Day, let us reaffirm the value of South-South cooperation. When countries, multilateral agencies and other partners work together throughout the South to pool know-how, exchange ideas and coordinate policies, they unleash a creative force that furthers our development efforts and helps us build the future we want.”*

Ban Ki-Moon<sup>25</sup>

### **Introduction**

The use of science and technology transfer for development is not a recent idea; John Maynard Keynes emphasized on the effects of these two elements to underpin economic growth and overlap the age-old “economic problem”<sup>26</sup> of the nineteenth century. Science and technology transfer (STT) assist countries to reach processes of *know-how* in areas like production, innovation, extraction of natural resources, sustainable development, among others. STT is a long-term solution for developing countries to climb, in the words of Jeffrey Sachs, through the ladder of development.<sup>27</sup>

Science and technology transfer has been traditionally associated with developed countries (or countries from the North) giving the products of science and technology to developing ones (or countries from the South). Because of the nature of this means of exchange, topics such as intellectual property and the intensification of economic dependence have also been on the table while assessing both the nature and effects of the STT from the North to the South.

However, at the last quarter of the twentieth century a new tendency began to emerge in the international community with countries like Brazil, China, India and South Africa becoming the providers of science and technology to foster the development of other developing countries, intensifying South-South STT.<sup>28</sup> This is a consequence of the increase in the demand of goods and services from these growing economies and accounts for the emergence of

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<sup>25</sup> United Nations Department of Public Information. *Secretary General, in Message for United Nations South-South cooperation day, urges traditional aid recipients to step up engagement as providers* (SG/SM/14026), 2011.

<sup>26</sup> Jeffrey Sachs, *The End of Poverty*, 2005, p.3. The age-old economic problem refer to the basic premise that growth (e.g. production) is essential in order to guarantee “enough to everyone.”

<sup>27</sup> Jeffrey Sachs, *The End of Poverty*, 2005.

<sup>28</sup> Report from the Secretary General, *The State of South South Cooperation*, 2011, p. 2.

South-South trade and investment patterns, which has been considered by political leaders an important step towards deepening South-South through STT.<sup>29</sup>

### ***Science, Technology Transfer and Innovation***

Why has it been difficult for developing countries to produce their own science and technology? The answer to this question relies on innovation. In most developing countries, inventors might not be willing to take the risk of conceiving new ideas and making new products because the high fixed costs that represent to develop a new product.<sup>30</sup> Moreover, governments from these countries might not be able to support the innovation of science and technology projects because of distinct reasons that might be more of a priority than the development of such technology.<sup>31</sup>

Hausmann and Rodrik claim that government intervention is necessary to overlap this unproductive environment that causes science and technology innovation to be stalled.<sup>32</sup> Indeed, this intervention is necessary in circumstances when “Entrepreneurs in developing countries who start to produce standardized goods that have long been on the scene in more advanced countries are forced to make technological investments even though the goods in question may not be new in any sense.”<sup>33</sup> In addition to the consideration that government intervention is necessary, Hausmann and Rodrik analyze examples of countries that have been able to achieve development through science and technology transfer, such as Japan and South Korea, arriving to the conclusion that the success of these countries’ strategies might be related to the enhancement of South-South cooperation.

### ***South-South Cooperation***

In order to clearly understand what does South-South cooperation implies, we need to understand that a given and clear definition for this term cooperation has not been provided yet. In fact, in 2011 the United Nations Joint Special Unit (JPU) prepared a report emphasizing the necessity of a more comprehensive definition that differentiates regular technical cooperation with South-South cooperation.<sup>34</sup> Moreover, while perfecting the concept of South-South cooperation the analysis of the concept of North-North cooperation might be useful as well.

Historically, when referring to North-South cooperation, the tendency is to associate the term with the Official Development Assistance (ODA) in form of economic aid provided mainly by the members of the Organization of Economic Cooperation and Development (OECD). Curiously, when talking about South-South cooperation there is not an exact differentiation between “cooperation” and ODA.<sup>35</sup> In fact, “a deeper understanding of South-South cooperation requires defining each aspect of South-South relations such as South-South trade, South-South investment, South-South technology transfers, (...) South-South development cooperation”<sup>36</sup> in a way that is not limited to comparing and contrasting the terms North-South and South-South cooperation.

Another important concept that needs to be taken into account when talking about South-South cooperation is the one referring to Triangular Cooperation (TC). This term refers to a situation when developed countries or multilateral institutions provide cooperation to a developing country in order to assist another developing country.<sup>37</sup> The Nairobi outcome document of the High-level United Nations Conference on South-South Cooperation, adopted in 2009, defines TC as the:

“(...) support provided by developed countries, international organizations and civil society to developing countries, upon their request, in improving their expertise and national capacities through triangular cooperation mechanisms, including direct support or cost-sharing arrangements, joint research and development projects, third-country training programs and support for South-South centers, as well as by

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<sup>29</sup> Report from the Secretary General, *The State of South South Cooperation*, 2011, p. 2.

<sup>30</sup> Jeffrey Sachs, *The End of Poverty*, 2005, p. 62.

<sup>31</sup> Jeffrey Sachs, *The End of Poverty*, 2005, p. 62.

<sup>32</sup> Hausmann, Ricardo and Dani Rodrik, *Economic development as self discovery*, 2003.

<sup>33</sup> Hausmann, Ricardo and Dani Rodrik, *Economic development as self discovery*, 2003, p. 24

<sup>34</sup> Zarhan, Roman-Morey and Inomata, *South-South and triangular cooperation in the United Nations system*, 2011, p. 3

<sup>35</sup> OECD, *Remarks by Mr. Yiping Zhou, Director of the Special Unit for South-South Cooperation in UNDP to the OECD meeting of National Focal Points for Policy Coherence for Development*, 2010, p.2

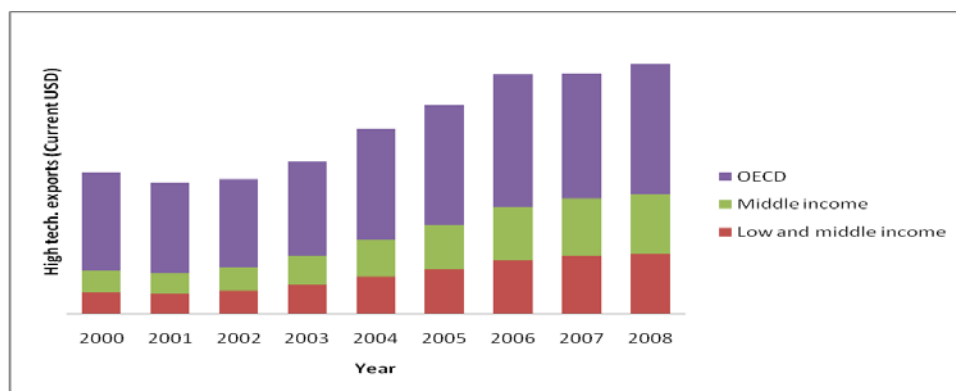
<sup>36</sup> OECD, *Remarks by Mr. Yiping Zhou, Director of the Special Unit for South-South Cooperation in UNDP to the OECD meeting of National Focal Points for Policy Coherence for Development*, 2010, p.2

<sup>37</sup> Zarhan, Roman-Morey and Inomata, *South-South and triangular cooperation in the United Nations system*, 2011, p.6

providing the necessary knowledge, experience and resources, so as to assist other developing countries, in accordance with their national development priorities and strategies.”<sup>38</sup>

### ***Are Developing Countries Exporting Technology?***

One important question that arises when talking about the role of South-South cooperation for the advancement of science and technology transfer for developing countries is if developing countries actually produce science and technology that could be used by other developing countries in their development policies. As an answer to this question, the following figure reveals the increase of the participation of middle and low-income countries in the production of high technology exports from 2000 to 2008.<sup>39</sup> As shown in the graph, since 2001 the trend is positive, meaning that countries from the South are not only producing more high-technology but also exporting it to other countries. Therefore, developing countries are producing their own high-technology and using it to foster new commercial relations that could lead other developing countries to further develop their economies.



Source: World Bank<sup>40</sup>  
Elaboration: Author

### ***The UN and South-South Science and Technology Transfer***

#### *Special Unit for South-South Cooperation*

Resolution 3251 of the United National General Assembly entitled “Technical Cooperation Among Developing Countries” that was adopted in 1974 endorsed the need for the establishment of a program to promote technical cooperation between developing countries.<sup>41</sup> The main function of such program, now converted into the Special Unit for South-South Cooperation, is to coordinate cooperation policies within the UN system and between the UN and Member States. Four years after the creation of this Unit, the Buenos Aires Plan of Action -mentioned in the following section- strengthened it in order to fulfill its mandate of promoting South-South and Triangular Cooperation between developing countries, as acknowledged in 1978 with Resolution 33/134 of the UN General Assembly.<sup>42</sup> Currently, the Special Unit for South-South Cooperation works along with UN related bodies such as the Economic and Social Council (ECOSOC), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA) and the Group of 77+China. The Unit also serves as the coordinator of the UN South-South efforts, and performs four main functions which are: advocacy, convening, coordinating and developing mechanisms, and raising resources.<sup>43</sup>

#### *Buenos Aires Plan of Action*

<sup>38</sup> Nairobi Outcome Document, 2010.

<sup>40</sup> World Bank. *High-technology exports*.

<sup>41</sup> Special Unit for South- South cooperation. *Who we are*. (n.d).

<sup>42</sup> Special Unit for South- South cooperation. *Who we are*. (n.d).

<sup>43</sup> OECD, Remarks by Mr. Yiping Zhou, Director of the Special Unit for South-South Cooperation in UNDP to the OECD meeting of National Focal Points for Policy Coherence for Development, 2010, p.4

The Buenos Aires Plan of Action (BAPA) was adopted by the United Nations Conference on Technical Cooperation in 1978.<sup>44</sup> It represents one of the most important documents regarding technical cooperation among developing countries (TCDC) since it provides a practical guide for reaching objectives related to this purpose.<sup>45</sup> Since its adoption, the BAPA has been a cornerstone for all United Nations efforts regarding the enhancement of South-South Cooperation, especially because it sets forth nine specific objectives. Four of the most important objectives are the following:

1. “To foster the self-reliance of developing countries through the enhancement of their creative capacity to find solutions to other development problems in keeping with their own aspirations, values and special needs;”<sup>46</sup>
2. To strengthen the capacity of developing countries to identify and analyze together the main issues of their development and to formulate the requisite strategies in the conduct of their international economic relations, through pooling of knowledge available in those countries through joint studies by their existing institutions, with a view to establishing the new international economic order; <sup>47</sup>
3. To improve the capacity of developing countries for the absorption and adaptation of technology and skill to meeting their specific developmental needs; <sup>48</sup>
4. To recognize and respond to the problems and requirements of the least Developed, land-locked, island developing and most seriously affected countries.”<sup>49</sup>

#### *The High-Level Committee on South-South Cooperation of the General Assembly*

Another very important UN organism that deals with the promotion of South-South cooperation is the High-Level Committee on South-South Cooperation, which is a sub-committee of the General Assembly created by its resolution 33/134 of 1978.<sup>50</sup> Although it was created by the General Assembly, it is currently under the administration of the UNDP. This High-Level Committee meets biannually in order to review, on an intergovernmental basis, the state of South-South cooperation within the UN development system.<sup>51</sup> “Participants at the [High-Level Committee] include representatives of Member States of the United Nations and observers: UN specialized agencies, funds and programs; regional commissions; and other subregional, regional and interregional intergovernmental organizations as well as accredited non-governmental organizations.”<sup>52</sup> The main functions of the Committee are based in recommendation 37 of the Buenos Aires Plan of Action, and include:

1. “Reviewing the progress made in implementing the tasks entrusted to the United Nations development system in the Buenos Aires Plan of Action;”<sup>53</sup>
2. Ensuring that efforts to strengthen TCDC are sustained within the United Nations development system;
3. Supporting new policies and innovative approaches to further the development of TCDC; <sup>54</sup>
4. Considering the availability of financial resources and their effective use by the United Nations development system, without prejudice to existing programmes; <sup>55</sup> and
5. Ensuring coordination of the promotional and operational TCDC activities of the United Nations development system.”<sup>56</sup>

The High Level Committee has been one of the main pillars on South-South cooperation by working together with the special Unit for South-South Cooperation.

#### *The International Centre for South-South Cooperation in Science, Technology and Innovation.*

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<sup>44</sup> Benn, Denis. *Buenos Aires Plan of Action (forward)*. 1994

<sup>45</sup> Benn, Denis. *Buenos Aires Plan of Action (forward)*. 1994

<sup>46</sup> Buenos Aires Plan of Action, II objectives, objectives: a, c, g, h

<sup>47</sup> Buenos Aires Plan of Action, II objectives, objectives: a, c, g, h.

<sup>48</sup> Buenos Aires Plan of Action, II objectives, objectives: a, c, g, h.

<sup>49</sup> Buenos Aires Plan of Action, II objectives, objectives: a, c, g, h.

<sup>50</sup> [http://ssc.undp.org/content/ssc/services/policy/governing\\_bodies/high\\_level\\_committee.html](http://ssc.undp.org/content/ssc/services/policy/governing_bodies/high_level_committee.html).

<sup>51</sup> Special Unit for South South cooperation. *The high level committee on South South cooperation, 17th session*. 2012.

<sup>52</sup> Special Unit for South- South cooperation. *Global South-South development policy*. (n.d).

<sup>53</sup> Special Unit for South- South cooperation. *Global South-South development policy*. (n.d).

<sup>54</sup> Special Unit for South- South cooperation. *Global South-South development policy*. (n.d).

<sup>55</sup> Special Unit for South- South cooperation. *Global South-South development policy*. (n.d).

<sup>56</sup> Special Unit for South- South cooperation. *Global South-South development policy*. (n.d).

The creation of the International Centre for South-South Cooperation in Science, Technology and Innovation was under the auspices of the United Nations Educational, Scientific and Cultural Organization (UNESCO) as a follow-up to the 2005 Doha Plan of Action of the Group of 77 and China (G77+China).<sup>57</sup> “As reflected by its name, the Centre will act as an international platform for South-South cooperation in science, technology and innovation and make use of the network of the G77 plus China and the Organization of the Islamic Conference.”<sup>58</sup> The headquarters of the centre are in Kuala Lumpur, Malaysia.<sup>59</sup>

Among its most important accomplishments are the organization of workshops and seminars in order to capacitate population of developing countries in order to foster South-South cooperation. Moreover, its overall goal is to reach innovation for developing countries through science and technology by accomplishing the following functions:<sup>60</sup>

1. “Providing scientists, managers of research centres/ institutions and policy makers with short and medium-term training in specified areas;”<sup>61</sup>
2. Fostering cooperation among governments, academia and industry in order to facilitate transfer of knowledge between the public and private sectors, and the development of well-planned and relevant knowledge-based programmes and institutions in participating countries;”<sup>62</sup>
3. Scanning and making available knowledge about the potential of new technologies to address specific problems faced by developing countries;”<sup>63</sup>
4. Developing networks and collaborative Research & Development and training programmes at regional and international levels including linking of designated nodal centres in participating countries;”<sup>64</sup>
5. Creating a problem-solving network of centres of excellence in developing countries;”<sup>65</sup>
6. Supporting the exchange of researchers, scientists and technologists among developing countries; and
7. Facilitating the exchange and dissemination of information.”<sup>66</sup>

### ***The South-South Global Assets and Technology Exchange***

The South-South Global Assets and Technology Exchange (SS-GATE) was created as a business platform in 2006 by the Special Unit on South-South Cooperation and works along with the UNDP. This is another pillar for South-South cooperation under the mandate of the Special Unit for South-South Cooperation. The SS-GATE was basically created to counteract the so-called “market failure technology policy paradigm”, which refers to the effect that transactions costs can have on the variation of the cost of a product, therefore also influencing international investment and trade.<sup>67</sup>

Basically, it is “a virtual and physical platform where entrepreneurs in developing countries can interact and obtain needed technology, assets and finance in a secure environment”<sup>68</sup>; facilitating business transactions and operating through a global network of participating organizations and institutions.<sup>69</sup> The participation in SS-GATE is controlled through institutional membership.<sup>70</sup> Moreover, the SS-GATE counts with a multi-track strategy based on Small and Medium Enterprise Technology and Assets Exchange; Human Development Investment Exchange; Creative Economy Projects Exchange; Energy and Environment Projects Exchange; and Global Health Exchange.<sup>71</sup> Its headquarters are currently located in Shanghai, China.

<sup>57</sup> International Centre for South-South Cooperation in Science, Technology and Innovation, *Historical background.*,(n.d).

<sup>58</sup> International Centre for South-South Cooperation in Science, Technology and Innovation, *Historical background.*,(n.d).

<sup>59</sup> International Centre for South-South Cooperation in Science, Technology and Innovation, *Constitution.*(n.d).

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<sup>61</sup> International Centre for South-South Cooperation in Science, Technology and Innovation, *Historical background.*,(n.d)

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<sup>64</sup> International Centre for South-South Cooperation in Science, Technology and Innovation, *Historical background.*,(n.d)

<sup>65</sup> International Centre for South-South Cooperation in Science, Technology and Innovation, *Historical background.*,(n.d)

<sup>66</sup> International Centre for South-South Cooperation in Science, Technology and Innovation, *Historical background.*,(n.d)

<sup>67</sup> Barry Bozeman, *Technology Transfer and Public Policy: a review of research and theory*, 2000, p.632

<sup>68</sup> The South-South Global Assets and technology exchange. *About us.* (n.d).

<sup>69</sup> The South-South Global Assets and technology exchange. *About us.* (n.d).

<sup>70</sup> The South-South Global Assets and technology exchange. *About us.* (n.d).

<sup>71</sup> The South-South Global Assets and technology exchange (SS-GATE). *South –South gateway for sustainable prosperity.* (n.d). p. 5

## *Case Studies*

### *USA-Brazil-Developing countries*

Even though we have discussed the importance of South-South cooperation, we cannot discard the importance that North-South partnerships accounts for, especially taking into account the role of countries from the North in Triangular Cooperation, which is currently an important way of increasing science and technology transfer for the advancement of developing countries. The following case-study shows a case of Triangular Cooperation between the United States, Brazil and China.

Brazil's space program was created in 1961 when the National Space Commission began to develop a satellite technology.<sup>72</sup> "In 1993, with assistance of a private firm from the United States, Brazil launched its first resource-data collecting satellite from Kennedy Space Center in Florida."<sup>73</sup>

"The effort began with the training of young Brazilian scientists and technicians largely in US universities and research laboratories. The programs initial steps took place with the direct help of private firms and public institutions in the West: Brazil's first satellite was launched from the United States with a US rocket. The knowledge and know-how that Brazilian space scientists and technologists have acquired is now being put to use to help nations throughout the developing world examine critical environmental problems."<sup>74</sup>

With the technology acquired since then, Brazil began to work in a space initiative with the government of China, called the China-Brazil Earth Resources Satellites Program (CBERS).<sup>75</sup> What started as a bilateral cooperation between the United States and Brazil was further strengthened when China was included in the research program and, as a domino effect, was later on used to foster cooperation between Brazil and other developing countries. In fact, thanks to this initiative Brazil has become self-sufficient in matters related to air and space science and technology and is currently giving support to African nations by providing data from the satellites through United Nations Educational Scientific and Cultural Organization.<sup>76</sup> This case study demonstrates how North-South cooperation can benefit South-South cooperation as well.

### *Chile*

Due to its constant economic growth, the improvement of living conditions and other related factors, Chile has become a very important partner for the rest of the developing countries in its region.<sup>77</sup> Since the consolidation of its economic growth, Chile has begun to get interested on the idea of international cooperation in the areas of leadership, economic growth and governmental institutions' improvement.<sup>78</sup> The report of Irene Philipi for the Special Unit for South-South Cooperation highlights the following parameters in which Chile has cooperated with the rest of the region: "Managing best practice experiences, building capacities for absorbing successful experiences, sharing accomplishments to support each other; and transferring knowledge capital."<sup>79</sup>

The same report emphasizes on what can Chile receive from the region to foster a win-win cooperation, including: "Productive Chains: SME Integration into larger productive processes, entrepreneurial Capacity Building and International Training Enhancement, school for Government and Regional Entrepreneurial Initiatives, change in Business Culture for Small and Medium Enterprises (SMEs) Consultancy services, change in Chile's SME development paradigm: the end of the zero sum game mentality"<sup>80</sup>

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<sup>72</sup> Mohamed Hassan, *Challenges, Opportunities and Strategies for South-South Co-operation in Science and Technology in the 21st Century*, 2000

<sup>73</sup> Mohamed Hassan, *Challenges, Opportunities and Strategies for South-South Co-operation in Science and Technology in the 21st Century*, 2000

<sup>74</sup> Mohamed Hassan, *Challenges, Opportunities and Strategies for South-South Co-operation in Science and Technology in the 21st Century*, 2000

<sup>75</sup> Mohamed Hassan, *Challenges, Opportunities and Strategies for South-South Co-operation in Science and Technology in the 21st Century*, 2000

<sup>76</sup> Mohamed Hassan, *Challenges, Opportunities and Strategies for South-South Co-operation in Science and Technology in the 21st Century*, 2000.

<sup>77</sup> Irene Philipi, *The case of UNDP Chile becoming a South-South cooperation center*, 2006, p. 24

<sup>78</sup> Irene Philipi, *The case of UNDP Chile becoming a South-South cooperation center*, 2006, p.24-25

<sup>79</sup> Irene Philipi, *The case of UNDP Chile becoming a South-South cooperation center*, 2006, p.25

<sup>80</sup> Irene Philipi, *The case of UNDP Chile becoming a South-South cooperation center*, 2006, p.27-28

Meanwhile, Chile's International Cooperation Agency has been working closely with the UNDP in order to get the most prominent results working as a leader country for the development of Latin America and the Caribbean. This case study will give its results on the future, but it is important to take into consideration that a country like Chile in Latin America could be instrumental to foster effective South-South as well as triangular cooperation.

### **Conclusion**

South-South cooperation has a broad structure that can help countries to reach development in the long-term period. North-South, South-South and Triangular Cooperation are mechanisms of science and technology exchange that have been used to help low income countries that cannot innovate and create technological and scientific infrastructures on their own. Some developing countries are beginning to export technology, meaning that they are leaving primary production and creating a chain for other countries to start importing, learning the know-how (via capacitation and application of scientific methods) and then producing by themselves this technology. The coordination among the UN system is getting more suitable for the objectives and purposes of South-South Cooperation. However, work still to be done, especially because of the restrictions that lack of funding and political unwillingness can put on the allocation of resources on multi-country projects.<sup>81</sup> The role of science and technology transfer in the advancement of developing countries certainly depends on the level of commitment of science and technology-producing states. In this regard, to what extent can the CSTD foster science and technology transfer under the umbrella of South-South cooperation if countries are unwilling or unable to cooperate? How can states enhance their participation in this science and technology transfer in situations where other topics besides political willingness are involved, such as intellectual property? What is the role of developed countries, or countries from the North, in the science and technology transfer from developing countries to developing countries? Among others, these are some of the questions that delegates are expected to answer while making their research on this topic.

## **Annotated Bibliography**

### ***I. South-South Cooperation for the Advancement of Science and Technology Transfer in Developing Countries***

Mohamed Hassan, *Challenges, Opportunities and Strategies for South-South Co-operation in Science and Technology in the 21st Century*, 2000. Retrieved July 30<sup>th</sup> 2012 from: [http://wmy2000.math.jussieu.fr/9\\_2000\\_Feb-KOREA.htm](http://wmy2000.math.jussieu.fr/9_2000_Feb-KOREA.htm)

*This web source can be useful to delegates because they will find interesting information regarding science and technology transfer. This paper presents several case studies and strategies that countries involved within South-South cooperation could replicate. Hence, this paper from 2000 can work for delegates to do an evaluative comparison with recent results and strategies related to the topic.*

Ocampo, Jose and Rob Vos. (2008). *Uneven Economic Development*. United Nations. New York. Retrieved June 30<sup>th</sup> 2012.

*This is a book that was co-edited by Columbia's professor of Economics, Jose Antonio Ocampo. This will provide delegates with a really strong background in order to understand the differences between the developed and the developing world. Its international relations perspective gives this book the accurate relevance to understand the necessity of stronger ties between developing countries.*

Organization of Economic Cooperation and Development, (2010) "*Remarks by Mr. Yiping Zhou, Director of the Special Unit for South-South Cooperation in UNDP to the OECD meeting of National Focal Points for Policy Coherence for Development*", Retrieved June 30<sup>th</sup> 2012. From: <http://www.oecd.org/dataoecd/31/15/46188961.pdf>

*This is a brief speech from the Director of the Special Unit for South-South Cooperation. This text will help delegates to understand, in very basic terms, what South-South cooperation refers to and its differences with North-South cooperation. Furthermore, it gives delegates an introduction to the main UN bodies related to South-South cooperation.*

Report from the Secretary General (2011), *The State of South South Cooperation*, Retrieved June 30<sup>th</sup> 2012 . From: <http://ssc.undp.org/content/dam/ssc/documents/HLC%202012/1%20State%20of%20South->

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<sup>81</sup> Report from the Secretary General, *The State of South South Cooperation*, 2011, challenges. P.17



[South%20Cooperation,%20Report%20of%20the%20Secretary-General%20-%203%20%20Aug%202011.pdf](#)

*This report from the Secretary General gives an evaluation to South-South cooperation in a general way. It refers to different areas within cooperation such as: economics, international trade, technology transfer, etc. Its recommendations are instrumental for making forecasts of the importance of South-South cooperation in the developing world.*

Sachs, Jeffrey. (2005). *The End of Poverty: economic possibilities of our time*. New York. Retrieved July 31st 2012. *This is, probably, one of the best books you will find on the topic of economic development. It is very broad on its topics but delegates will find, in a very understandable language, facts and analysis given by Columbia's professor Jeffrey Sachs.*

Zarhan, Roman-Morey and Inomata. (2011). *South-South and triangular cooperation in the United Nations system*, Geneva. [http://www.unjui.org/data/reports/2011/JIU\\_REP\\_2011\\_03\\_Final.pdf](http://www.unjui.org/data/reports/2011/JIU_REP_2011_03_Final.pdf)

*This document is similar to the aforementioned report of the Secretary-General, but in a more extended version. Basically, it gives the current status of South-South and triangular cooperation and gives recommendations that could be instrumental at the time delegates prepare their working papers. The body that makes this document, the Joint Inspection Unit (JIU), works in order to complement the work of the High Level Committee for South-South Cooperation by giving not just assessment but also recommendations.*

## **II. Improved Access to Renewable Energy Technologies as a Means for Achieving Sustainable Development**

### ***Introduction***

Over the last decades, energy matters have progressively moved to the very top of the international environmental agenda. Particularly, renewable energy has increasingly emerged as a potential win-win alternative solution for both assuring social and economic development within societies, and protecting the environment. There has been, indeed, a growing recognition among international actors – nongovernmental organizations (NGO's), intergovernmental organizations (IGO's), regional and international donors, governments, etc. – that improving the access to renewable energy technologies is of crucial importance in combating poverty, and represents the so-called foundation for sustainable economic growth. Nevertheless, currently, 2.4 billion people still rely on traditional biomass for cooking and 1.6 billion people do not have access to electricity.<sup>82</sup> This situation entrenches poverty, compels the efficient supply of social services, and corrodes environmental sustainability at the local, national and international levels. Improving the access to energy services is therefore key to address the latter and to achieve the Millennium Development Goals (MDGs).

On another hand, fossil fuels are still dominant and will continue to be. By 2030, 90% percent of the increase in energy will account to oil.<sup>83</sup> Although natural gas demand is expected to grow fastest in the next decades, oil will still be the largest individual fuel source.<sup>84</sup> On the basis of present policies, global energy-related emissions of carbon dioxide are projected to increase by 1.8% per year, reaching 38 billion tones in 2030, 70% more than today.<sup>85</sup> As oil consumption intensifies worldwide, oil prices will most probably tend to increase too, reaching some of the highest historical levels in the next few decades.<sup>86</sup> Finally, restrained access to clean energy technologies has also intensified the geopolitical debate concerning the security and reassurance of energy supplies worldwide.

Considering this scenario; international, regional and domestic policies aimed at improving access to non-polluting and sustainable sources of energy are not only desirable but indispensable in order to mitigate climate disruption, preserve the ecosystem, enhance public health, increase better-quality provision of water, and upsurge productivity reducing the dependency on fossil fuels and traditional sources of energy.

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<sup>82</sup> UN Energy Paper. *The Energy Challenge for Achieving the Millennium Development Goals*, 2005.

<sup>83</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 1.

<sup>84</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 1.

<sup>85</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 1.

<sup>86</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 7.

## *History and Context*

Nowadays, over one third of the world's population does not have access to electricity, more than 60% of the world's coal reserves are located in just three regions, and 75% of natural gas assets are held by the Organization of Petroleum Exporting Countries (OPEC) Member States.<sup>87</sup> These not only account for a very uneven spatial distribution of energy reserves but also increase the importance of realizing improved access to clean energy sources, especially for developing countries.<sup>88</sup> Moreover, economic and population growth will continue to drive an expansion of the global energy market. Therefore, if there is not a shift in the current patterns of traditional energy production and consumption, and in the uneven access of the world's population to modern energy technologies, world sustainable development will continue to be disrupted and irreversible environmental damage will be inevitable.<sup>89</sup>

Under this picture, greater access to energy is not a goal in itself, but a means of achieving sustainability worldwide. Wide-ranging changes and groundbreaking actions are imperative if energy systems are to promote economic and social development within developing nations. Such actions should be aimed specifically at expanding access to affordable, reliable, and adequate energy technologies, supplies and services, while addressing environmental impacts at all levels.

The need for global policies that prevent dangerous interference with the climate while addressing universal energy needs is a central challenge under the current framework. Comprehensive international and domestic initiatives for improving access to renewable energy technologies should pursue the mitigation of and adaption to climate change while at the same time seek to maximize public health benefits through improving air, water, and food quality. Energy supports all sectors of the economy, and enhanced access to modern energy services is essential to attaining the development of the population and the sustainability of the environment.<sup>90</sup> Addressing the intimate link between renewable energy and sustainable development is key. Renewable and environmentally friendly energy initiatives must be encouraged and implemented by full-scale plan in use and application if the international community is serious about realizing sustainable development. Following this vision, policy maker's acknowledgment of the need of cooperative and joint efforts towards increasing the availability and accessibility to reliable and efficient energy technologies in order to stimulate sustainable development is the leading move towards the formulation of long-term actions. Such actions should uphold the promotion of innovative Renewable Energy Technologies (RETs) by – among other things – reducing emissions of dioxide of carbon (CO<sub>2</sub>) at the local and global levels.<sup>91</sup>

## *Some Important Definitions*

### *Renewable Energy Technologies (RETs)*

Renewable Energy Technologies (RETs) are “technologies that provide modern energy services – such as electricity, clean cooking fuels, and mechanical power – by harnessing the power of renewable energy.”<sup>92</sup> In addition, the International Energy Agency (IEA) defines renewable energy as “the energy derived from natural processes that are replenished constantly. In its various forms, it derives directly or indirectly from the sun, or from heat generated deep within the earth. Included in the definition is energy generated from solar, wind, biomass, geothermal, hydropower and ocean resources, and biofuels and hydrogen derived from renewable resources.”<sup>93</sup>

### *Sustainable Development and Sustainability*

In a general basis, sustainable development can be understood as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.<sup>94</sup> Speaking more broadly, the term sustainability has been framed under the three-pillar model: economy, ecology and society.<sup>95</sup> The three of them

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<sup>87</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 10.

<sup>88</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 10.

<sup>89</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 10.

<sup>90</sup> Report of the Secretary General, *New and emerging technologies: renewable energy for development*, 2010.

<sup>91</sup> United Nations Development Program. *World Assessment*, 2000, p.4

<sup>92</sup> Report of the Secretary General, *New and emerging technologies: renewable energy for development*, 2010, p. 6

<sup>93</sup> International Energy Agency, *Renewables Information*, 2009.

<sup>94</sup> United Nations Development Program. *World Assessment*, 2000, p.4

<sup>95</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 713

considered interconnected and relevant for sustainability, recognizing therefore the encompassing nature of the sustainability concept, and allowing for a schematic categorization of sustainability issues.<sup>96</sup> Following this line, the UN General Assembly has undertaken actions towards the integration of these components of sustainable development — economic development, social development and environmental protection— as interdependent and mutually reinforcing.<sup>97</sup> This view subscribes to an understanding where a certain set of actions – e.g., substitution of fossil fuels with renewable energy sources – can fulfill all economic, social and environmental development goals simultaneously.

### *Energy Access*

The global environmental community recognizes the term energy access as “access to clean, reliable and affordable energy services for cooking and heating, lighting, communications and productive uses.”<sup>98</sup> Although a basic level of electricity access that replaces other sources of fuel for purposes such as lighting and allows for communication, healthcare and education, can provide substantial benefits to a community or household; this broader definition enables understanding on the term energy access as the adequate level of energy access needed to satisfy basic services and productive uses therefore improving the livelihood of developing countries’ inhabitants and driving local economic development on a sustainable basis.<sup>99</sup>

Access to modern energy services, whether from renewable or non-renewable sources, is intimately connected with means for development, particularly for those countries at earlier development stages.<sup>100</sup> Certainly, the link between adequate energy services and the accomplishment of the MDGs was defined unambiguously in the Johannesburg Plan of Implementation in 2002.<sup>101</sup>

### *Energy Efficiency*

Energy efficiency refers to the ratio between the valued service that energy provides – light, mechanical power, mobility – and energy input.<sup>102</sup> Following this definition, improving energy efficiency – both by reducing quantities of energy consumed and by changing processes – provides a powerful means for reaching sustainable development. By diminishing the need for investment in energy infrastructure, cutting fuel costs, increasing competitiveness for businesses, and improving welfare for consumers; energy efficiency can naturally uphold the realization of sustainability, especially for developing countries.<sup>103</sup> It can also create environmental benefits through reduced emissions of greenhouse gases and local air pollutants, and can offer social benefits in the form of enhanced energy security through decreasing the reliance on fossil fuels, particularly when imported.<sup>104</sup>

### *Energy Security*

There is no universally accepted definition of the term energy security and its meaning has proved to be highly context-dependent.<sup>105</sup> At a general level, energy security can be understood as heftiness against sudden disruptions of energy supply.<sup>106</sup> Under this view, two broad themes can be identified as key to upholding energy security, whether for current systems or for future renewable energy systems: availability and distribution of resources, and variability and reliability of energy supply.<sup>107</sup> Due to the interdependence between economic growth and energy consumption, access to a stable and steady energy supply is not only a political concern but a technical and economic challenge facing both developed and developing economies since prolonged disruptions generate severe economic and social

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<sup>96</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 713

<sup>97</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 713

<sup>98</sup> The Secretary-General Advisory Group on Energy and Climate Change (AGECC), *Summary Report and Recommendations*, 2000, p. 13

<sup>99</sup> The Secretary-General Advisory Group on Energy and Climate Change (AGECC), *Summary Report and Recommendations*, 2000, p. 13

<sup>100</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 716

<sup>101</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 716

<sup>102</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 8

<sup>103</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 8

<sup>104</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 8

<sup>105</sup> Krut et. al., *Indicators for energy security*, 2009, p. 2168

<sup>106</sup> Grubb et. al., *Diversity and security in UK electricity generation: The influence of low-carbon objectives*, 2006, p. 4056

<sup>107</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 753.

problems for most societies.<sup>108</sup>

### ***The Current Global Energy Scenario***

With prices of crude oil and its refined products rising sharply since 1999, and economic and population growth expanding the global energy market; threats of environmental damage – caused by an indiscriminate use of traditional energy sources and an unequal world’s population access to modern energy technologies – are not only imminent but irreparable.<sup>109</sup> Moreover, social and economic development will keep being disrupted when roughly still 1.6 billion people in developing countries – especially in rural and remote areas – do not have access to electricity, and 2.4 billion people still rely on traditional biomass fuels for their energy and therefore must collect and burn straw, dung, and scraps of wood to cook their meals.<sup>110</sup> While both average per capita energy consumption in developing countries and the share of commercial energy is indeed rising throughout 2002 – 2030; the number of people relying on traditional fuels for cooking and heating is also growing from under 2.4 billion in 2002 to over 2.6 billion in 2030.<sup>111</sup>

While many governments claim to support the diffusion of RE sources, the actual rate of diffusion of new RETs varies considerably according to the national context.<sup>112</sup> Many countries in the Latin American and Caribbean (LAC) region are endowed with large amounts of renewable energy sources.<sup>113</sup> Solar, wind, biomass, small hydro and other energy resources from the ocean, are available in the region in larger or smaller quantities, depending on the geographical location the individual countries.<sup>114</sup> Mexico, Venezuela, Colombia and Brazil, for instance, have substantial oil resources to support their economies.<sup>115</sup> Hydropower resources are available in Brazil’s and that of most Central American countries.<sup>116</sup> Natural gas is plentiful in countries like Argentina, Bolivia and Peru, but still needs to be developed in some of these countries.<sup>117</sup>

Technological advances, economies of scale in production, declining costs, and political support drive the rise of RETs nowadays.<sup>118</sup> Over the past five years, annual installations of wind farms have doubled, whereas annual installations of solar power systems have increased six-fold.<sup>119</sup> Total installed capacities of both technologies have risen at an annual rate of 20–30 percent over the past ten years.<sup>120</sup> “While the costs of on-shore wind turbines have declined by 12–18 percent with each doubling of global capacity, the costs of solar PV have declined by 20 percent per doubling.”<sup>121</sup> The market for solar thermal collectors raised some 50 percent between 2001 and 2004. “About 18 million square meters of capacity were added in 2004, mostly in China, bringing the energy equivalent of global installations to a level far exceeding that of global wind and solar power combined.”<sup>122</sup> The production and consumption of biofuels are also advancing swiftly commended by agricultural, environmental, and consumer interests.<sup>123</sup> Fuel ethanol production has increased 13.6 percent, reaching almost 33 billion liters.<sup>124</sup>

Worldwide, at least 45 countries have policy targets for renewable energy. Ten of these have been introduced by developing countries, including Brazil, China, Dominican Republic, Egypt, India, Korea, Malaysia, Mali, South Africa, and Thailand. Generation of small hydropower, geothermal power, and biomass power in developing countries each account for more than half of total global generation. Both India and China have developed substantial domestic manufacturing of wind turbines and solar PV modules. The Philippines emerged as a solar PV

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<sup>108</sup> Larsen and Sonderberg, *Rise Energy Report 8: The intelligent energy system infrastructure for the future*, 2009.

<sup>109</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 7.

<sup>110</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6.

<sup>111</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 1.

<sup>112</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2.

<sup>113</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2.

<sup>114</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2.

<sup>115</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2.

<sup>116</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2.

<sup>117</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2.

<sup>118</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16.

<sup>119</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16.

<sup>120</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16.

<sup>121</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16.

<sup>122</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16.

<sup>123</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16.

<sup>124</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16.

manufacturer as well, and Thailand will soon follow suit.<sup>125</sup>

Cleaner energy initiatives are expected to grow in the future. Renewable energy sources as a whole will increase their share of electricity generation.<sup>126</sup> Whereas the stake of hydroelectricity will fall, the stocks of other renewables in electricity generation will triple from 2% in 2002 to 6% in 2030.<sup>127</sup> Most of the increase will be in wind and biomass. In fact, wind power will be the second largest renewable source of electricity in 2030, after hydroelectricity.<sup>128</sup> This will result in the improvement of environmental sustainability due to RETs low-to non-existent CO<sub>2</sub> emissions, will contribute to the generation of new economic opportunities, and will enhance national energy security since RE can be locally produced.<sup>129</sup>

### ***The Link between Renewable Energy Technologies and Sustainable Development***

Over the past few decades, many industrialized societies have improved their citizens' quality of life by exploiting renewable fossil energy sources.<sup>130</sup> In fact, access to RETs and all services derived from it contribute to improved living standards, greater access to information, better-quality provision of water and health services, and increased productivity.<sup>131</sup> The development, appropriate distribution and further deployment of RETs could be a key element in providing electricity to the rural poor, and advancing energy security by diversifying energy sources and reducing dependence on a limited number of suppliers, thus decreasing the countries' economy vulnerability to price volatility.<sup>132</sup> Most renewable energies use indigenous resources therefore enhancing a country's independence from external supplies of primary fuels, and creating local employment opportunities.<sup>133</sup>

Additionally, energy choices have broad macroeconomic effects influencing the ability of governments to meet the immediate needs of their poorer citizens. During a time of high and unstable oil prices, the impact of energy import-dependence on low-income countries and on poor households is of increasing concern.<sup>134</sup> Although a handful of low-income countries are net exporters of oil; the majority are not.<sup>135</sup> In fact, many suffer from energy-import bills that represent significant percentages of both the gross domestic product (GDP) and full export earnings. The latter urges for the adequate development and proper deployment of RETs as quickly and cost-effectively as possible in order to realize worldwide sustainability.<sup>136</sup>

### ***Environmental Impact***

Over the past two decades the risk of environmental degradation have become more apparent.<sup>137</sup> The environmental impact of human activities has grown dramatically because of the sheer increase of world population, consumption, and industrial activity.<sup>138</sup> Indeed, the use of fossil fuels and other traditional sources of energy accounts for critical environmental damage since such materials release large amounts of carbon dioxide into the atmosphere adding to global warming and climate change.<sup>139</sup>

In this regard, the decrease in the usage of greenhouse gas intensive supplies accompanied by pollution control measures is essential.<sup>140</sup> Industry has also a role to play through the design of products that utilize fewer amounts of traditional energy sources, and produce lower greenhouse gas emissions.<sup>141</sup> Initiatives such as the publicly reporting on environmental performance against meaningful targets, utilizing clear labels and declarations so that customers

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<sup>125</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16

<sup>126</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2

<sup>127</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2

<sup>128</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2

<sup>129</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p. 16

<sup>130</sup> Christensen et. al., *Renewable Energy in the Context of Sustainable Development*, p. 716

<sup>131</sup> Report of the Secretary General, *New and emerging technologies: renewable energy for development*, 2010.

<sup>132</sup> Report of the Secretary General, *New and emerging technologies: renewable energy for development*, 2010.

<sup>133</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 2

<sup>134</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.7

<sup>135</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.7

<sup>136</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.7

<sup>137</sup> Omer, *Renewable Energy for Sustainable Development And Environment*, 2007, p.4

<sup>138</sup> Omer, *Renewable Energy for Sustainable Development And Environment*, 2007, p.4

<sup>139</sup> Omer, *Renewable Energy for Sustainable Development And Environment*, 2007, p.4

<sup>140</sup> Omer, *Renewable Energy for Sustainable Development And Environment*, 2007, p.4

<sup>141</sup> Omer, *Renewable Energy for Sustainable Development And Environment*, 2007, p.4

are fully informed, building stakeholder confidence by communicating sustainability account for key actions for achieving sustainable development and lowering environmental damage.<sup>142</sup> Thus, the adoption of renewable energy sources by developing countries will not only assist them in reducing their dependence on imports of fuel to generate energy, but will also ensure their inhabitants a cleaner and safer environment.<sup>143</sup> RETs enhance environmental sustainability and account for low to non-existent CO2 emissions, they provide a viable way of enhancing energy security through the diversification of energy supplies while taking into consideration concerns about climate change.<sup>144</sup>

### ***The Role of Renewable Energy Technologies (RETs) in meeting the MDGs***

Access to RETs is widely recognized as being of central importance for achieving the MDGs.<sup>145</sup> Although energy is not explicitly mentioned in any of the MDGs, there is a growing recognition that improved access to modern energy services play a crucial role in the advancement of living conditions around the world.<sup>146</sup> For example: MDG number 1 pleads for halving the proportion of the world's people living on less than USD\$1 a day by 2015. It is highly unlikely that such a poverty-reduction target could be achieved unless access to electricity can be provided to another half-a-billion of the people that will still lack it.<sup>147</sup> Following this affirmation, meeting MDG number 1 implies a need to extend the use of modern cooking and heating fuels technologies to 700 million more people by 2015.<sup>148</sup> This added to the fact that, in recent decades, the energy needs of low-income countries have been met most often via petroleum-based liquid fuels and by extension of the electricity grid, which is power-driven mainly by fossil fuels and hydropower.<sup>149</sup> These options have traditionally benefited from government subsidies and are widely available on world markets.<sup>150</sup> However, such conventional energy systems are frequently out of reach for inhabitants of remote areas, and even in urban slums, they are sometimes too expensive to afford. In addition, in many developing countries, most of the fuel and many of the technologies are imported.<sup>151</sup> "Of the 47 poorest countries, 38 are net importers of oil, and 25 import all of their oil."<sup>152</sup> Therefore, "the economic risk of relying primarily on imported energy has grown in recent years as oil prices have become less stable, doubling in less than two years to over \$60 per barrel."<sup>153</sup> These rising prices have had a disproportionate impact on population in low-income countries who depend on kerosene and liquefied petroleum gas (LPG) for cooking and heating.<sup>154</sup> In most of these countries, governments still subsidize basic fuels, such as kerosene, and the cost of these subsidies has sky-rocketed in the past years, therefore reducing the assets available to governments to finance basic services such as education, health care, provision of clean water, and other public investments that are vital for meeting the MDGs.<sup>155</sup>

In this regard, providing modern energy services – derived from an enhanced access to RETs – is not only crucial for the eradication of extreme poverty and for reducing hunger but also for supporting governments in meeting the objectives established by the MDGs concerning health, education, gender, and environmental protection.<sup>156</sup> Enforcing a competitive and diversified energy portfolio is vital to the development of domestic industry and employment, national economic health, and the availability of public funding to achieve the MDGs.<sup>157</sup>

### ***Actions and Strategies Directed to Access Improvement to RETs***

As the production and consumption of energy has become one of the most demanding issues in the development and environmental global agenda, governments, international organizations and donors, and the civil society are urged to enhance local and regional efforts in order to deliver adequate and affordable energy supplies to un-served areas.

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<sup>142</sup> Omer, *Renewable Energy for Sustainable Development And Environment*, 2007, p.5

<sup>143</sup> Omer, *Renewable Energy for Sustainable Development And Environment*, 2007, p.4

<sup>144</sup> Report of the Secretary General, *New and emerging technologies: renewable energy for development*, 2010.

<sup>145</sup> Report of the Secretary General, *New and emerging technologies: renewable energy for development*, 2010.

<sup>146</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>147</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>148</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>149</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>150</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>151</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>152</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>153</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>154</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>155</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>156</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

<sup>157</sup> Flavin et. al., *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*, p.6

Such efforts include: providing liquid and gaseous fuels for cooking, and electricity for domestic and commercial use<sup>158</sup>; widening the diffusion and use of renewable energy technologies through: reducing price distortions and encouraging competitive market conditions; introducing wide-ranging and more effective regulatory measures to advance market operations and their public benefits; removing barriers to energy efficiency; complementing energy sector restructuring with specific regulations encouraging sustainable energy development; mobilizing economic, social and political investments in sustainable energy technologies; accelerating technological innovation at every stage of the energy innovation chain; building institutional and human capacity in the development and further implementation and deployment of RTEs; supporting local technological leadership by transferring technology, and building human and institutional capacity in developing countries. Moreover, the enhancement of international cooperation by means of improving governmental and intergovernmental actions seeking to expand RETs' accessibility and advancing access to affordable modern and clean energy supplies for local communities, business and industry, and world consumers.<sup>159</sup>

### ***International Initiatives and Frameworks***

The increase in oil prices and the related growing concern on the security of energy supplies have compelled the international community to endorse actions towards achieving a RE world.<sup>160</sup> In fact, many initiatives regarding the production and improved access to new energy sources have been undertaken within the UN System.<sup>161</sup> The UN programs, conventions and processes most concerned with the issue of energy are the United Nations Environment Program (UNEP), the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Program (UNDP), the Commission on Sustainable Development, and the UN Summits of 2000 (Millennium Summit) and of 2005 (World Summit), as well as the Rio Process and the 1992 World Summit on Sustainable Development (WSSD).<sup>162</sup> Moreover, the issue of renewable energy has been also taken on by the G8 process, and the Gleneagles Dialogue to which the World Bank, the International Energy Agency (IEA) are contributing.<sup>163</sup> Furthermore, outside the UN system, the specialized series of the International Renewable Energy Conferences, which started in 2004 with the Bonn Renewables 2004 Conference, are working towards advancing renewable energy policies and technologies through an innovative and high-level dialogue of governments and stakeholders.<sup>164</sup> Finally, the International Renewable Energy Agency (IRENA), an intergovernmental organization established in January 2009, provides advice and support to governments worldwide in promoting a transition towards the widespread use of renewable energy.<sup>165</sup>

CSTD Member States have also undertaken several initiatives aimed at measuring the impact of science and technology for sustainable development. Strategies to advance global understanding on the use of renewable energy technologies, particularly in developing countries have been developed and implemented over the last decade.<sup>166</sup> Relevant CSTD decisions include ECOSOC Resolutions 2009/8 and 2010/3 on science and technology for attaining sustainable development. However, efforts still fall short and the role the CSTD in achieving energy security and overarching development must be enhanced through – beyond other things - the commission's enrollment in the advancement of RETs development, implementation and worldwide diffusion; and the coordination on the formulation of policies and joint actions between the governments, international donors and civil society.

### ***Challenges***

In this context, there are a number of challenges facing both developing and industrialized Member States regarding achieving improved access to renewable energies as a means to uphold sustainable development. Besides a lack of adequate widespread global recognition of the importance of including the development and proper utilization of renewable energies at the policy and planning levels, there are important obstacles in the gathering of reliable

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<sup>158</sup> Jefferson, *Energy Policies for Sustainable Development*, p.2.

<sup>159</sup> Jefferson, *Energy Policies for Sustainable Development*, p.2.

<sup>160</sup> *Renewable Energy in the International Policy Process*, p.1.

<sup>161</sup> *Renewable Energy in the International Policy Process*, p.1.

<sup>162</sup> *Renewable Energy in the International Policy Process*, p.1.

<sup>163</sup> *Renewable Energy in the International Policy Process*, p.1.

<sup>164</sup> *Renewable Energy in the International Policy Process*, p.1.

<sup>165</sup> *Renewable Energy in the International Policy Process*, p.1.

<sup>166</sup> United Nations Conference on Trade and Development, *Commission on Science and Technology for Development (CSTD)*, 2012.

renewable energy data, and an existing wide range of shortage of information, technical knowledge and training in the use and application of RETs.<sup>167</sup> Summed up to these, is the existence of real market barriers for achieving energy efficiency measures, for example: uncertainties about the performance of investments, lack of capital or financing possibilities, high initial and perceived costs of more efficient technologies, high transaction costs, lack of incentives for maintenance - when energy bills are paid by the renter rather than by the property owner – and foremost, the persistence of consumer patterns and habits such as inertia, convenience, and prestige differential benefits to the user relative to the investor.<sup>168</sup>

### **Conclusion**

The greatest challenge comes when a society is asked to move from addressing tangible current needs to taking actions for the sake of future generations.<sup>169</sup> Such move in the face of contesting short-term interests entails a major reformulation in the approach to RETs.<sup>170</sup> The latter requires a new global consensus, fundamentally the development of a new energy paradigm estranged with accomplishing sustainable development. This, in turn, needs to be reproduced in international, regional and national priorities.<sup>171</sup> For such a shift to occur, the sustainability debate urges higher public awareness, information, and commitment. If public support for sustainable energy development is not approaching its materialization, it will be exceptionally difficult to implement many of the policies discussed above.<sup>172</sup> Realizing a truly sustainable energy system calls for technological breakthroughs that drastically alter how we produce and use energy. In this regard, the pace of RETs development and deployment is key to achieving a more economically, socially and environmentally sustainable global energy system in the long term.<sup>173</sup> In this spirit, governments must act determinedly to accelerate the transition to modern fuels and to disrupt the vicious circle of energy poverty and low living conditions.

Under this scenario, the CSTD – along with international donors and civil society advocates – should act as a catalyzer for increasing access to clean and renewable energy, and facilitating the development, transfer and diffusion of renewable energy technologies.<sup>174</sup> Moreover, the CSDT represents an important intergovernmental forum for calling on Member States to provide an enabling environment, which would in turn encourage private and public sector initiatives in the generation and utilization of new and emerging energy technologies.<sup>175</sup> In this regard, what specific steps can CSDT Member States take to ensure that energy policy planning is not conducted separated from sustainable development? How can energy and environment policymaking be integrated more closely? To what extent can renewable energy sources meet the growing energy needs of your region? Are there specific steps your government can take to foster renewable energies accessibility?<sup>176</sup> Are energy security, economic growth and environmental protection domestic policy drivers of your country?

## **Annotated Bibliography**

### ***II. Improved Access to Renewable Energy Technologies as a Means for Achieving Sustainable Development***

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*This report is an outcome document of the Thirteenth Session of the CSTD held in Geneva, in 2010. It seeks to identify means to overcome the challenges related to the deployment and scaling-up of new and emerging renewable energy technologies in developing countries. The document upholds improved access to energy services as of crucial importance to achieving the Millennium Development Goals, and affirms the need to enhance energy security through diversification of*

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<sup>167</sup> Omer, *Renewable Energy for Sustainable Development And Environment*, 2007, p.7

<sup>168</sup> Jefferson, *Energy Policies for Sustainable Development*, p. 7

<sup>169</sup> Jefferson, *Energy Policies for Sustainable Development*, p. 4

<sup>170</sup> Jefferson, *Energy Policies for Sustainable Development*, p. 4

<sup>171</sup> Jefferson, *Energy Policies for Sustainable Development*, p. 4

<sup>172</sup> Jefferson, *Energy Policies for Sustainable Development*, p. 4.

<sup>173</sup> Jefferson, *Energy Policies for Sustainable Development*, p. 4.

<sup>174</sup> Report of the Secretary General, *New and emerging technologies: renewable energy for development*. 2010.

<sup>175</sup> UNCTD, *Commission on Science and Technology for Development, thirteenth session*. 2010.

<sup>176</sup> United Nations Environment Program, *Renewable Energies and Energy Efficiency*, 2005, p. 6



*energy supply, taking into account concerns about climate change. The report is an important source for delegates since it includes relevant information on energy challenges and development nowadays, new and emerging RETs, and alternative ways for overcoming the challenges the deployment of RETs in developing countries.*

Flavin, et. al. (n.d.). *The Potential Role of Renewable Energy in Meeting the Millennium Development Goals*. Retrieved June 29, 2012 from <http://www.worldwatch.org/system/files/ren21-1.pdf>

*The paper was prepared for the Renewable Energy Policy Network for the 21<sup>st</sup> Century, which is an outcome of the Bonn International Conference for Renewable Energies taken place in 2004. The document studies the extents to which increased use of renewable energy can provide reliable and affordable energy services, and assist developing countries in expediting their economic development and alleviating poverty. It is particular useful for delegates since it aims to demonstrate the potential contribution of renewable energy in attaining the MDGS and realizing sustainable development. Moreover, the paper will raise delegates' awareness on the importance of boosting the global share of renewable sources through the enhancement of international leadership on renewable energy, beyond other things.*

Jacobsson, Stefan & Anna Johnson. (2000). *The diffusion of renewable energy technology: an analytical framework and key issues for research*. Retrieved June 30, 2012 from <http://www.sciencedirect.com/science/article/pii/S0301421500000410>

*This article spreads light on the fact that over the last two decades there has been a double-digit growth rate in the market for some renewable energy technologies. The authors argue that the latter should be analyzed and examined using an innovation system perspective where the focus is on networks, institutions and firms' perceptions, and strategies. The objective of the paper is therefore to present the bare bones of such an analytical framework, as well as, identifying a set of key issues related to the speed and direction of such an energy transformation process which needs to be analyzed further. Delegates will find this particular article very helpful since it provides them with a clear definition of RETs, and includes relevant information on the current diffusion of RETs worldwide. Moreover, the document is important for delegates' research since it presents some interests figures such as the total energy supply from biofuels in many European countries, the accumulated wind power capacity in the world, the stock of solar collector area in Europe, the accumulated world shipment of photovoltaic cells, the distribution of government fund in the RE sector in the OECD countries, beyond others.*

Jacobsson, Stefan & Volmark Lauber. (2004). *The politics and policy of energy system transformation – explaining the German diffusion of renewable energy technology*. Retrieved June 29, 2012 from <http://www.sciencedirect.com/science/article/pii/S0301421504002393>

*This paper acknowledges the need for a transition to a low-carbon economy by positioning the diffusion of new technologies, such as those for the generation of electricity from renewable energy sources, as a central issue for achieving sustainability. The article explores the motives for the particularly rapid spread of RETs in Germany, especially wind turbines and solar cells. It traces this diffusion to the nature of the policy instruments employed and to the political process, which led the adoption of these instruments. The analysis reveals how the German regulatory framework is formed in a 'battle over institutions' where the parliament backed support policies for renewables sourced electricity against the opposition from nuclear and coal interests groups. It also shows the societal costs underlying the development of RETs in Germany, including both subsidies to coal and the negative external economies of coal. The paper is of particular interest to delegates since it reveals the controversies underlying the traditional advocacy of new energy sources and electricity generation means, as well as, the politics behind the development, production and diffusion of RETs.*

Omer, Mustafa (2007). *Renewable Energy for Sustainable Development And Environment*. Retrieved June 26, 2012 from <http://www.sciencedirect.com/science/article/pii/S1364032107000834>

*The document highlights the increased availability of reliable and efficient energy services as a new development alternative, and the potential for integrated RE systems in the stationary and portable power market as an efficient response to the critical need for cleaner energy technologies. The paper demonstrates that anticipated patterns of future energy use and consequent*

*environmental impacts -acid precipitation, ozone depletion and the greenhouse effect or global warming- are actual threats to the environment. Throughout the theme, several issues relating to renewable energies, environment and sustainable development are examined from both current and future perspectives. The author concludes that renewable environmentally friendly energy must be encouraged, implemented and demonstrated by full-scale plan especially for use in remote rural areas. The article would be of utmost usefulness for delegates when investigating the topic since it includes a complete explanation of the link between traditional sources of energy, its production and consumption; and environmental damage; as well as, the relationship between traditional energy resources and productivity. It also provides delegates with overarching information regarding sustainable production policies targeted at producers; sustainable consumption policies targeted at consumers, and the overall structural change resulting of such innovation strategies.*

United Nations Environment Program. (2005). *Renewable Energies and Energy Efficiency*. Retrieved June 27, 2012 from

[http://www.google.com.ec/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CFoQFjAA&url=http%3A%2F%2Fwww.pnuma.org%2Fforodeministros%2F15-venezuela%2Fven04tri-RenewableEnergiesandEnergyEfficiency.pdf&ei=sbvXT\\_7YBoeu8ASBzd2RAg&usg=AFQjCNFoayPpZ2g1bHfQrRjpdF9D7NBVg&sig2=c6619DQQja3jcTf5r6m8Pw](http://www.google.com.ec/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CFoQFjAA&url=http%3A%2F%2Fwww.pnuma.org%2Fforodeministros%2F15-venezuela%2Fven04tri-RenewableEnergiesandEnergyEfficiency.pdf&ei=sbvXT_7YBoeu8ASBzd2RAg&usg=AFQjCNFoayPpZ2g1bHfQrRjpdF9D7NBVg&sig2=c6619DQQja3jcTf5r6m8Pw)

*This document is an outcome of the Fifteenth Meeting of the Forum of Ministers of the Environment of Latin America and the Caribbean that took place on 2004, in Caracas-Venezuela. It affirms that economic and global population growth will continue to drive an expansion of the global energy market and that if there is no shift in the current patterns of production and consumption; the security of energy supplies worldwide is under serious danger. Moreover, the document acknowledges the fact that is unlikely that the MDGs would be met by 2015 unless access to electricity can be provided to another half-a-billion of the population that still lacks it. The document will be useful for delegates since it provides them with relevant figures and data on energy current production and consumption on LAC region countries, showing similarities and disparities in terms of availability of conventional energy sources and access to RETs. Finally, the paper sheds light on successful energy efficiency experiences in the region helping delegates to understand the regional potential of RE sources, specially wind energy and biofuels.*

United Nations Development Program. (2000). *World Energy Assessment*. Retrieved June 27, 2012 from

<http://www.undp.org/content/dam/aplaws/publication/en/publications/environment-energy/www-ee-library/sustainable-energy/world-energy-assessment-energy-and-the-challenge-of-sustainability/World%20Energy%20Assessment-2000.pdf>

*The paper presents detailed information on the current energy scenario and future trends of production, development and consumption. It asserts the access to renewable energy sources as key for achieving the interrelated economic, social, and environmental aims of human sustainable development, and upholds the need for creating energy systems that would lead to a more equitable, environmentally sound, and economically viable world. The paper sheds light on the importance of balancing the effects of energy consumption and the protection of the environment, and includes information on the share of renewable energies within the environmental agenda, as well as, examines different alternatives towards the transition to modern fuels. The article includes important data on oil, gas and coal national and international reserves, and recent trends in energy intensity in countries and regions. The document is important to delegates because it provides them with an inclusive and in-depth background analysis on energy assessment, and numerous actions directed to promote energy efficiency and renewables, It encourages delegates to think out of the box upholding the development of strategies towards breaking the circle of energy poverty and human under-development in the world's poorest areas.*

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# **Rules of Procedure**

## **Economic and Social Council Plenary**

### ***Introduction***

1. These rules shall be the only rules which apply to the Economic and Social Council Plenary (hereinafter referred to as “the Council”) and shall be considered adopted by the Council prior to its first meeting.
2. For purposes of these rules, the Plenary Director, the Assistant Director(s), the Under-Secretaries-General, and the Assistant Secretaries-General, are designates and agents of the Secretary-General and Director-General, and are collectively referred to as the “Secretariat.”
3. Interpretation of the rules shall be reserved exclusively to the Director-General or her or his designate. Such interpretation shall be in accordance with the philosophy and principles of the National Model United Nations and in furtherance of the educational mission of that organization.
4. For the purposes of these rules, “President” shall refer to the chairperson or acting chairperson of the Council.

### I. SESSIONS

#### ***Rule 1 - Dates of convening and adjournment***

The Council shall meet every year in regular session, commencing and closing on the dates designated by the Secretary-General.

#### ***Rule 2 - Place of sessions***

The Council shall meet at a location designated by the Secretary-General.

### II. AGENDA

#### ***Rule 3 - Provisional agenda***

The provisional agenda shall be drawn up by the Secretary-General and communicated to the Members of the Council at least sixty days before the opening of the session.

#### ***Rule 4 - Adoption of the agenda***

The agenda provided by the Secretary-General shall be considered adopted as of the beginning of the session. The order of the agenda items shall be determined by a majority vote of those present and voting. Items on the agenda may be amended or deleted by the Council by a two-thirds majority of the members present and voting.

*The vote described in this rule is a procedural vote and, as such, observers are permitted to cast a vote. For purposes of this rule, those present and voting means those delegates, including observers, in attendance at the meeting during which this motion comes to a vote.*

#### ***Rule 5 - Revision of the agenda***

During a session, the Council may revise the agenda by adding, deleting, deferring or amending items. Only important and urgent items shall be added to the agenda during a session. Permission to speak on a motion to revise the agenda shall be accorded only to three representatives in favor of, and three opposed to, the revision. Additional items of an important and urgent character, proposed for inclusion in the agenda less than thirty days before the opening of a session, may be placed on the agenda if the Council so decides by a two-thirds majority of the members present and voting. No additional item may, unless the Council decides otherwise by a two-thirds majority of the members present and voting, be considered until a committee has reported on the question concerned.

*For purposes of this rule, the determination of an item of an important and urgent character is subject to the discretion of the Secretariat, and any such determination is final. If an item is determined to be of such a character, then it requires a two-thirds vote of the Council to be placed on the agenda. It will, however, not be considered by the Council until a committee has reported on the question. The votes described in this rule are substantive vote, and, as such, observers are not permitted to cast a vote. For purposes of this rule, the members present and voting means members (not including observers) in attendance at the session during which this motion comes to vote.*

#### ***Rule 6 - Explanatory memorandum***

Any item proposed for inclusion in the agenda shall be accompanied by an explanatory memorandum and, if

possible, by basic documents.

### III. SECRETARIAT

#### ***Rule 7 - Duties of the Secretary-General***

1. The Secretary-General or her/his designate shall act in this capacity in all meetings of the Council.
2. The Secretary-General shall provide and direct the staff required by the Council and be responsible for all the arrangements that may be necessary for its meetings.

#### ***Rule 8 - Duties of the Secretariat***

The Secretariat shall receive, print, and distribute documents, reports, and resolutions of the Council, and shall distribute documents of the Council to the Members, and generally perform all other work which the Council may require.

#### ***Rule 9 - Statements by the Secretariat***

The Secretary-General, or her/his representative, may make oral as well as written statements to the Council concerning any question under consideration.

#### ***Rule 10 - Selection of the President***

The Secretary-General or her/his designate shall appoint, from applications received by the Secretariat, a President who shall hold office and, *inter alia*, chair the Council for the duration of the session, unless otherwise decided by the Secretary-General.

#### ***Rule 11 - Replacement of the President***

If the President is unable to perform her/his functions, a new President shall be appointed for the unexpired term at the discretion of the Secretary-General.

### IV. LANGUAGE

#### ***Rule 12 - Official and working language***

English shall be the official and working language of the Council.

#### ***Rule 13 - Interpretation (oral) or translation (written)***

Any representative wishing to address any body or submit a document in a language other than English shall provide interpretation or translation into English.

*This rule does not affect the total speaking time allotted to those representatives wishing to address the body in a language other than English. As such, both the speech and the interpretation must be within the set time limit.*

### V. CONDUCT OF BUSINESS

#### ***Rule 14 – Quorum***

The President may declare a meeting open and permit debate to proceed when representatives of at least one third of the members of the Council are present. The presence of representatives of a majority of the members of the Council shall be required for any decision to be taken.

*For purposes of this rule, members of the Council means the total number of members (not including observers) in attendance at the first night's meeting.*

#### ***Rule 15 - General powers of the President***

In addition to exercising the powers conferred upon him or her elsewhere by these rules, the President shall declare the opening and closing of each meeting of the Council, direct the discussions, ensure observance of these rules, accord the right to speak, put questions to the vote and announce decisions. The President, subject to these rules, shall have complete control of the proceedings of the Council and over the maintenance of order at its meetings. He or she shall rule on points of order. He or she may propose to the Council the closure of the list of speakers, a

limitation on the time to be allowed to speakers and on the number of times the representative of each member may speak on an item, the adjournment or closure of the debate, and the suspension or adjournment of a meeting.

*Included in these enumerated powers is the President's power to assign speaking times for all speeches incidental to motions and amendment. Further, the President is to use her/his discretion, upon the advice and at the consent of the Secretariat, to determine whether to entertain a particular motion based on the philosophy and principles of the NMUN. Such discretion should be used on a limited basis and only under circumstances where it is necessary to advance the educational mission of the Conference. For purposes of this rule, the President's power to propose to the Council entails her/his power to entertain motions, and not to move the body on his or her own motion.*

**Rule 16**

The President, in the exercise of her or his functions, remains under the authority of the Council.

**Rule 17 - Points of order**

During the discussion of any matter, a representative may rise to a point of order, which shall be decided immediately by the President. Any appeal of the decision of the President shall be immediately put to a vote, and the ruling of the President shall stand unless overruled by a majority of the members present and voting.

*Such points of order should not under any circumstances interrupt the speech of a fellow representative. Any questions on order arising during a speech made by a representative should be raised at the conclusion of the speech, or can be addressed by the President, sua sponte, during the speech. For purposes of this rule, —the members present and voting mean those members (not including observers) in attendance at the meeting during which this motion comes to vote.*

**Rule 18**

A representative may not, in rising to a point of order, speak on the substance of the matter under discussion.

**Rule 19 - Speeches**

1. No one may address the Council without having previously obtained the permission of the President. The President shall call upon speakers in the order in which they signify their desire to speak.
2. Debate shall be confined to the question before the Council, and the President may call a speaker to order if her/his remarks are not relevant to the subject under discussion.
3. The Council may limit the time allowed to speakers and all representatives may speak on any question. Permission to speak on a motion to set such limits shall be accorded only to two representatives favoring and two opposing such limits, after which the motion shall be put to the vote immediately. When debate is limited and a speaker exceeds the allotted time, the President shall call her or him to order without delay.

*In line with the philosophy and principles of the NMUN, in furtherance of its educational mission, and for the purpose of facilitating debate, if the President determines that the Council in large part does not want to deviate from the limits to the speaker's time as it is then set, and that any additional motions will not be well received by the body, the President, in her/his discretion, and on the advice and consent of the Secretariat, may rule as dilatory any additional motions to change the limits of the speaker's time.*

**Rule 20 - Closing of list of speakers**

Members may only be on the list of speakers once but may be added again after having spoken. During the course of a debate the President may announce the list of speakers and, with the consent of the Council, declare the list closed. When there are no more speakers, the President shall declare the debate closed. Such closure shall have the same effect as closure by decision of the Council.

*The decision to announce the list of speakers is within the discretion of the President and should not be the subject of a motion by the Council. A motion to close the speakers' list is within the purview of the Council and the President should not act on her/his own motion.*

**Rule 21 - Right of reply**

If a remark impugns the integrity of a representative's State, the President may permit that representative to exercise



her/his right of reply following the conclusion of the controversial speech, and shall determine an appropriate time limit for the reply. No ruling on this question shall be subject to appeal.

*For purposes of this rule, a remark that impugns the integrity of a representative's State is one directed at the governing authority of that State and/or one that puts into question that State's sovereignty or a portion thereof. All interventions in the exercise of the right of reply shall be addressed in writing to the Secretariat and shall not be raised as a point of order or motion. The reply shall be read to the Council by the representative only upon approval of the Secretariat, and in no case after voting has concluded on all matters relating to the agenda topic, during the discussion of which, the right arose.*

**Rule 22 - Suspension of the meeting**

During the discussion of any matter, a representative may move the suspension of the meeting, specifying a time for reconvening. Such motions shall not be debated but shall be put to a vote immediately, requiring the support of a majority of the members present and voting to pass.

**Rule 23 - Adjournment of the meeting**

During the discussion of any matter, a representative may move the adjournment of the meeting. Such motions shall not be debated but shall be put to the vote immediately, requiring the support of a majority of the members present and voting to pass. After adjournment, the Council shall reconvene at its next regularly scheduled meeting time.

*As this motion, if successful, would end the meeting until the Council's next regularly scheduled session the following year, and in accordance with the philosophy and principles of the NMUN and in furtherance of its educational mission, the President will not entertain such a motion until the end of the last meeting of the Council.*

**Rule 24 - Adjournment of debate**

A representative may at any time move the adjournment of debate on the topic under discussion. Permission to speak on the motion shall be accorded to two representatives favoring and two opposing adjournment, after which the motion shall be put to a vote immediately, requiring the support of a majority of the members present and voting to pass. If a motion for adjournment passes, the topic is considered dismissed and no action will be taken on it.

**Rule 25 - Closure of debate**

A representative may at any time move the closure of debate on the item under discussion, whether or not any other representative has signified her/his wish to speak. Permission to speak on the motion shall be accorded only to two representatives opposing the closure, after which the motion shall be put to the vote immediately. Closure of debate shall require a two-thirds majority of the members present and voting. If the Council favors the closure of debate, the Council shall immediately move to vote on all proposals introduced under that agenda item.

**Rule 26 - Order of motions** Subject to rule 23, the motions indicated below shall have precedence in the following order over all proposals or other motions before the meeting:

- a) To suspend the meeting;
- b) To adjourn the meeting;
- c) To adjourn the debate on the item under discussion;
- d) To close the debate on the item under discussion.

**Rule 27 - Proposals and amendments**

Proposals and substantive amendments shall normally be submitted in writing to the Secretariat, with the names of twenty percent of the members of the Council would like the Council to consider the proposal or amendment. The Secretariat may, at its discretion, approve the proposal or amendment for circulation among the delegations. As a general rule, no proposal shall be put to the vote at any meeting of the Council unless copies of it have been circulated to all delegations. The President may, however, permit the discussion and consideration of amendments or of motions as to procedure, even though such amendments and motions have not been circulated. If the sponsors agree to the adoption of a proposed amendment, the proposal shall be modified accordingly and no vote shall be taken on the proposed amendment. A document modified in this manner shall be considered as the proposal pending before the Council for all purposes, including subsequent amendments.

*For purposes of this rule, all proposals shall be in the form of working papers prior to their approval by the Secretariat. Working papers will not be copied, or in any other way distributed, to the Council by the Secretariat.*

*The distribution of such working papers is solely the responsibility of the sponsors of the working papers. Along these lines, and in furtherance of the philosophy and principles of the NMUN and for the purpose of advancing its educational mission, representatives should not directly refer to the substance of a working paper that has not yet been accepted as a draft resolution. After approval of a working paper, the proposal becomes a draft resolution and will be copied by the Secretariat for distribution to the Council. These draft resolutions are the collective property of the Council and, as such, the names of the original sponsors will be removed. The copying and distribution of amendments is at the discretion of the Secretariat, but the substance of all such amendments will be made available to all representatives in some form.*

**Rule 28 - Withdrawal of motions**

A proposal or a motion may be withdrawn by its sponsor at any time before voting has commenced, provided that it has not been amended. A motion thus withdrawn may be reintroduced by any representative.

**Rule 29 - Reconsideration of a topic**

When a topic has been adjourned, it may not be reconsidered at the same session unless the Council, by a two-thirds majority of those present and voting, so decides. Reconsideration can only be moved by a representative who voted on the prevailing side of the original motion to adjourn. Permission to speak on a motion to reconsider shall be accorded only to two speakers opposing the motion, after which it shall be put to the vote immediately.

*For purposes of this rule, those present and voting means those representatives, including observers, in attendance at the meeting during which this motion is voted upon by the body.*

## VI. VOTING

**Rule 30 - Voting rights**

Each member of the Council shall have one vote.

*This rule applies to substantive voting on amendments, draft resolutions, and portions of draft resolutions divided out by motion. As such, all references to member(s) do not include observers, who are not permitted to cast votes on substantive matters.*

**Rule 31 - Request for a vote**

A proposal or motion before the Council for decision shall be voted upon if any member so requests. Where no member requests a vote, the Council may adopt proposals or motions without a vote.

*For purposes of this rule, proposal means any draft resolution, an amendment thereto, or a portion of a draft resolution divided out by motion. Just prior to a vote on a particular proposal or motion, the President may ask if there are any objections to passing the proposal or motion by acclamation, or a member may move to accept the proposal or motion by acclamation. If there are no objections to the proposal or motion, then it is adopted without a vote.*

**Rule 32 - Majority required**

1. Unless specified otherwise in these rules, decisions of the Assembly shall be made by a majority of the members present and voting.
2. For the purpose of tabulation, the phrase “members present and voting” means members casting an affirmative or negative vote. Members which abstain from voting are considered as not voting.

*All members declaring their representative States as “present and voting” during the attendance roll call for the meeting during which the substantive voting occurs, must cast an affirmative or negative vote, and cannot abstain.*

**Rule 33 - Method of voting**

1. The Council shall normally vote by a show of placards, except that a representative may request a roll call, which shall be taken in the English alphabetical order of the names of the members, beginning with the member whose name is randomly selected by the President. The name of each present member shall be called in any roll call, and one of its representatives shall reply “yes,” “no,” “abstention,” or “pass.”

*Only those members who designate themselves as present or present and voting during the attendance roll*

*call, or in some other manner communicate their attendance to the President and/or Secretariat, are permitted to vote and, as such, no others will be called during a roll-call vote. Any representatives replying pass, must, on the second time through, respond with either yes or no. A pass cannot be followed by a second pass for the same proposal or amendment, nor can it be followed by an abstention on that same proposal or amendment.*

2. When the Council votes by mechanical means, a non-recorded vote shall replace a vote by show of placards and a recorded vote shall replace a roll-call vote. A representative may request a recorded vote. In the case of a recorded vote, the Council shall dispense with the procedure of calling out the names of the members.
3. The vote of each member participating in a roll call or a recorded vote shall be inserted in the record.

***Rule 34 - Explanations of vote***

Representatives may make brief statements consisting solely of explanation of their votes after the voting has been completed. The representatives of a member sponsoring a proposal or motion shall not speak in explanation of vote thereon, except if it has been amended, and the member has voted against the proposal or motion.

*All explanations of vote must be submitted to the President in writing before debate on the topic is closed, except where the representative is of a member sponsoring the proposal, as described in the second clause, in which case the explanation of vote must be submitted to the President in writing immediately after voting on the topic ends.*

***Rule 35 - Conduct during voting***

After the President has announced the commencement of voting, no representatives shall interrupt the voting except on a point of order in connection with the actual process of voting.

***Rule 36 - Division of proposals and amendments***

Immediately before a proposal or amendment comes to a vote, a representative may move that parts of a proposal or of an amendment should be voted on separately. If there are calls for multiple divisions, those shall be voted upon in an order to be set by the President where the most radical division will be voted upon first. If objection is made to the motion for division, the request for division shall be voted upon, requiring the support of a majority of those present and voting to pass. Permission to speak on the motion for division shall be given only to two speakers in favor and two speakers against. If the motion for division is carried, those parts of the proposal or of the amendment which are involved shall then be put to a vote. If all operative parts of the proposal or of the amendment have been rejected, the proposal or the amendment shall be considered to have been rejected as a whole.

*For purposes of this rule, most radical division means the division that will remove the greatest substance from the draft resolution, but not necessarily the one that will remove the most words or clauses. The determination of which division is most radical is subject to the discretion of the Secretariat, and any such determination is final.*

***Rule 37 - Amendments***

An amendment is a proposal that does no more than add to, delete from, or revise part of another proposal.

*An amendment can add, amend, or delete operative clauses, but cannot in any manner add, amend, delete, or otherwise affect perambulatory clauses.*

***Rule 38 - Order of voting on amendments***

When an amendment is moved to a proposal, the amendment shall be voted on first. When two or more amendments are moved to a proposal, the amendment furthest removed in substance from the original proposal shall be voted on first and then the amendment next furthest removed there from, and so on until all the amendments have been put to the vote. Where, however, the adoption of one amendment necessarily implies the rejection of another amendment, the latter shall not be put to the vote. If one or more amendments are adopted, the amended proposal shall then be voted on.

*For purposes of this rule, furthest removed in substance means the amendment that will have the most significant impact on the draft resolution. The determination of which amendment is furthest removed in substance is subject to the discretion of the Secretariat, and any such determination is final.*

**Rule 39 - Order of voting on proposals**

If two or more proposals, other than amendments, relate to the same question, they shall, unless the Council decides otherwise, be voted on in the order in which they were submitted.

**Rule 40 - The President shall not vote**

The President shall not vote but may designate another member of her/his delegation to vote in her/his place.

VII. CREDENTIALS

**Rule 41 - Credentials**

The credentials of representatives and the names of members of a delegation shall be submitted to the Secretary-General prior to the opening of a session.

**Rule 42**

The Council shall be bound by the actions of the General Assembly in all credentials matters and shall take no action regarding the credentials of any member.

VII. PARTICIPATION OF NON-MEMBERS OF THE COUNCIL

**Rule 43 - Participation of non-Member States**

1. The Council shall invite any Member of the United Nations that is not a member of the Council and any other State, to participate in its deliberations on any matter of particular concern to that State.
2. A committee or sessional body of the Council shall invite any State that is not one of its own members to participate in its deliberations on any matter of particular concern to that State.
3. A State thus invited shall not have the right to vote, but may submit proposals which may be put to the vote on request of any member of the body concerned.

*If the Council considers that the presence of a Member invited according to this rule is no longer necessary, it may withdraw the invitation again. Delegates invited to the Council according to this rule should also keep in mind their role and obligations in the committee that they were originally assigned to. For educational purposes of the NMUN Conference, the Secretariat may thus ask a delegate to return to his or her committee when his or her presence in the Council is no longer required.*

**Rule 45 - Participation of national liberation movements**

The Council may invite any national liberation movement recognized by the General Assembly to participate, without the right to vote, in its deliberations on any matter of particular concern to that movement.

**Rule 46 - Participation of and consultation with specialized agencies**

In accordance with the agreements concluded between the United Nations and the specialized agencies, the specialized agencies shall be entitled: a) To be represented at meetings of the Council and its subsidiary organs; b) To participate, without the right to vote, through their representatives, in deliberations with respect to items of concern to them and to submit proposals regarding such items, which may be put to the vote at the request of any member of the Council or of the subsidiary organ concerned.

**Rule 47 - Participation of non-governmental organization and intergovernmental organizations**

Representatives of non-governmental organizations/intergovernmental organizations accorded consultative observer status by the General Assembly and other non-governmental organizations/intergovernmental organizations designated on an ad hoc or a continuing basis by the Council on the recommendation of the Bureau, may participate, with the procedural right to vote, but not the substantive right to vote, in the deliberations of the Council on questions within the scope of the activities of the organizations.