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Geneva, 7–9 February 2005

REPORT OF THE EXPERT MEETING ON STRENGTHENING PARTICIPATION OF DEVELOPING COUNTRIES IN DYNAMIC AND NEW SECTORS OF WORLD TRADE: TRENDS, ISSUES AND POLICIES

Held at the Palais des Nations, Geneva,
from 7 to 9 February 2005

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CHAIRPERSON'S SUMMARY

Introduction

1. The Commission on Trade in Goods and Services, and Commodities, at its eighth session (held in 2004), decided to convene for the first time an expert meeting on promoting participation of developing countries in new and dynamic sectors of world trade. Also, the São Paulo Consensus decided that UNCTAD should conduct sectoral reviews of dynamic sectors of world trade (São Paulo Consensus, para. 95), which would constitute a new mandate for the organization.

2. The Expert Meeting on Strengthening Participation of Developing Countries in Dynamic and New Sectors of World Trade: Trends, Issues and Policies, held in Geneva from 7 to 9 February 2005, carried out the first review. It was attended by a large number of government officials at the ministerial, senior and expert levels from developed and developing countries, and countries with economies in transition, representatives of private companies and industry associations, academics, and representatives of intergovernmental organizations and non-governmental organizations (NGOs), and was thus a truly multi-stakeholder and unique event in the UN system.

3. The key objectives of the meeting were to:

- Identify and rank top-performing dynamic and new sectors through systematic analysis;
- Highlight opportunities for increased gains from trade in dynamic and new sectors, and their contribution to the diversification of the economic and technological base of developing countries, as well as improvement in their export value-added and growth performance;
- Consider in-depth key issues relating to supply capacity, competitiveness and market access, and the market entry matrix;
- Clarify UNCTAD's role in supporting these processes;
- Focus on international cooperation for capacity building;
- Foster linkages with the Millennium Development Goals.

4. The dynamic and new sectors of world trade and their products fall into three broad product categories: (a) those that have displayed consistently high growth and increased share in world trade, including ones in which developing countries have already achieved some export presence; (b) sectors and items already in existence but new on the list of export activities of developing countries; and (c) altogether new areas of trade in which developing countries have potential comparative advantage.

5. The Expert Meeting reviewed national and international policies and actions to enhance developing country participation in three sectors: (a) IT-enabled outsourcing of services; (b) renewable energy products, including bio-fuels; and (c) textiles and clothing. Particular attention was given to the least developed countries (LDCs) and African countries.

6. It was observed that the increasing participation of some developing countries in dynamic sectors of trade acted as both a driver and an outcome of the changing geography of international trade, which was signified by the dramatic growth in the share of developing countries in world trade flows. Thus, developing countries accounted for a 30 per cent export share of the 20 most dynamic merchandise product groups. On the other hand, many developing countries, especially LDCs and African countries, continued to specialize, in large part, in sectors that were among the least market dynamic in world trade. The inability of these countries to manage the challenges of, and reap the benefits from, the rapidly changing global trading and economic processes, and the resulting shifts in the international division of labour, was a source of continuing concern.

7. It was recognized that dynamic sectors could not be a panacea to resolve constraints faced by developing countries, and that not all countries would be able to participate in all the dynamic and new sectors. It was not a question of picking winners or encouraging developing countries to enter those sectors merely for the sake of participating in them. The purpose was to draw the attention of developing countries, including LDCs and African countries as well as their development partners, to potential opportunities presented by these sectors for greater diversification and improved domestic value-added from exports, which should be carefully examined in the light of the initial conditions, factor endowments and other determinants of comparative advantage of each country relative to each sector. In that regard, the interrelated issues of supply capacity, competitiveness, and market access and entry deserved particular attention.

8. It was pointed out that in exploring their potentials in dynamic and new sectors, the developing countries should pay special attention to the need to avoid the trap of low and declining value-added arising from (a) "export illusion", caused by the high import content of exports, wherein export earnings do not reflect the true domestic value-added; and (b) "fallacy of composition", which arises when too many countries rush into the same sectors or products, thereby driving down terms of trade and export earnings, and thus denying themselves the achievement of the objective of improving domestic value-added through diversification.

9. It was emphasized that the utility of sectoral review ultimately depended on the practical benefits it could yield for developing countries. Therefore, work done in this area needed to be effectively followed up, particularly by capacity-building support at national, subregional and regional levels. The success of UNCTAD efforts would depend critically on the engagement of the donor community. Donors were invited to include this issue in their respective development cooperation programmes and projects, including those that were implemented by UNCTAD.

10. Keynote statements were made by H.E. Mr. Albert Kan-Dapaah, Minister of Communications and Technology, Ghana, and Ms. Suani Teixeira Coelho, Deputy Secretary for the Environment, State of São Paulo, Brazil. Individual experts and specially invited resource persons put forward their views on each sector under consideration. The comments and suggestions made are summarized below.

I. IT-enabled outsourcing of services

11. Although not a new phenomenon, outsourcing — the practice of subcontracting non-core work to outside parties with a view to reducing costs and enhancing efficiency — is

increasingly becoming a key area of interest for a number of developing countries. Work in this multi-billion dollar industry, estimated to exceed $1 trillion by 2006, could be carried out onshore, that is within the country, or it could be "offshored" to another country as global outsourcing. Typically, offshored services range from customer contact centres, data entry operations, telemarketing and basic technical support at the lower end of the spectrum, to processing of financial transactions such as credit-card billing, insurance claims and debt collection in the middle of the spectrum, and professional services such as research and development, engineering and architectural design services, investment analysis, and medical diagnostics at the higher end of the spectrum.

12. The growth of the information-technology-enabled services (ITES) and business process outsourcing (BPO) sector has been fuelled by rapid advances in information and communication technologies (ICTs) during the last decade. They have introduced an element of tradability into a wide range of services that were hitherto tied to the geographical location of the consumer. As a result, a growing number of organizations are choosing to concentrate on their core activities by outsourcing an array of ancillary services to other organizations that can deliver them more efficiently and at lower cost. Others are taking advantage of falling international telecom rates to set up units in developing countries, which offer lower labour costs or larger pools of skilled workers, and this is leading to the phenomenon of offshored services.

13. India and the Philippines were among the first developing countries to enter the offshoring market, but a number of others in all developing country regions, as well as some countries with economies in transition followed suit, including China, Malaysia, Viet Nam, Bangladesh, South Africa, Ghana, Senegal, Kenya, Hungary, the Czech Republic, Mexico, Jamaica and Barbados. With appropriate national policies and supportive external market access and entry conditions, developing countries could reap an additional annual gain of $60 billion in ITES alone by 2008, which would make this sector an important driver of economic growth in a number of developing countries.

14. Firms' reasons for outsourcing include cost reduction; improvement of the quality of service; availability of 24 hours/7 days a week service delivery capability; access to a wider resource pool; leveraging brand in new markets; and spreading operational risks. Among the key considerations in identifying offshore destinations are the following: (a) availability of an educated and motivated workforce with appropriate language skills; (b) availability and adequacy of infrastructure and competitively priced bandwidth; (c) an appropriate legal framework that can provide security of data and protection of intellectual property; (d) long-term prospects of doing business in the country as affected by governance, security and sustainability of business operations; and (e) requirements relating to the ratio of local to foreign presence.

15. In spite of the clear gains for both the home-country firms and recipient countries, offshoring has created concern and protectionist opposition from some developed country constituencies. Some studies have shown that the offshoring firms gained more than the recipient countries. For example, when a US company offshored to India, $1 of offshoring created $1.45 of economic value, of which the US economy received $1.12 and the Indian economy 33 cents. Nonetheless, offshoring was often seen as a North–South issue despite the fact that almost 70 per cent of this trade was North–North. The United States accounted for 60 per cent of the market, and imported mainly from Canada and Ireland. On the other hand, India's recent emergence as a major offshoring destination could hardly be blamed for job

losses in the United States since India accounted for only about 1 per cent of US imports of all services and 2 per cent of the business services category.

16. From a business perspective, firms convinced of the benefits of offshoring made efforts to soften the impact of outsourcing on people and allay fears relating to job losses by adopting a broader offshoring strategy which also involved redeployment, placement support, training grants, and so forth. These models of soft-landing won the support of unions and created a more positive atmosphere.

Offshoring and developing country interests

17. Increased participation of developing and less developed countries in this sector can play a significant role in the realization of a number of Millennium Development Goals (MDGs), including development of decent and productive work for young people; the promotion of gender equality and empowerment of women; availability of the benefits of new technologies, especially ICTs; and the possibility of sustainable economic growth without taxing the country's environmental resources. The multiplier effect of jobs created in the ITES/BPO sector has had a rapid and demonstrable impact on poverty alleviation in urban areas. For example, a number of Indian companies, which started as providers of outsourcing activities, entered into partnerships with large international firms and some managed to spin off and established their own firms, creating significant employment in India and expanding their presence overseas. Crucial to their success was the world-quality service that they were able to deliver and their management of outsourcing activities as a strategic process.

18. Some developing countries, including LDCs and African countries, wishing to start and expand this trade, faced a number of inherent limitations, such as (a) inadequate basic infrastructure, including telecommunications, electricity and transportation, and insufficient capacity to modernize and develop it; (b) lack of trained human resources owing to the inability of the educational system to keep pace with technological developments; (c) difficulty in penetrating markets where early entrants had established their presence; and (d) difficulty in gaining the confidence of offshoring companies as regards those countries, especially in Africa, that were perceived to be politically unstable.

19. Although some developing countries might have already positioned themselves well, and been able to develop certain brand equity and capture very specific markets for offshore activities, there was enough scope for successful entry for other developing countries. First, the market was growing; second, improvements in technology allowed further expansion of activities that could be outsourced offshore; third, companies wished to diversify in order to spread their risks; fourth, recipient countries could succeed in establishing niche markets; and fifth, some early developing country entrants were ceasing certain types of offshored activities, presenting opportunities for others to enter.

Global outsourcing and the GATS

20. Global outsourcing was understood as trade in services through so-called cross-border supply of services embedded in the General Agreement on Trade in Services (GATS) as Mode 1 (supply of services). Among services sectors, computer and computer-related services have emerged as a particularly important sector in relation to global outsourcing in the ongoing GATS negotiations. Developing countries were seeking to lock in the prevailing

open regime in cross-border trade in services through comprehensive commitments on market access and national treatment within the framework of the GATS. At the same time, the dynamism of the ITES/BPO sector and the inclusion of an ever-expanding range of services in the trading basket, as well as the fact that the delivery of these services often straddled multiple services categories, posed a challenge to countries in dealing with classification.

21. Offshoring had important linkages with other GATS modes of service supply, and this made it imperative for national policy makers and trade negotiators in the GATS to take a holistic view of these linkages. Among these GATS modes of supply of services, Mode 4 (movement of natural persons) was of key interest to developing countries. In particular, offshoring required people to move for the purpose of securing the work, negotiating the contract, trouble-shooting, maintenance support, and so forth. Thus, to facilitate offshoring it was necessary to address the existing impediments to Mode 4 trade, including administrative procedures relating to visas, recognition of qualifications, and other limitations such as residence requirements, economic needs tests, wage parity requirements and compulsory social security contributions. Ensuring progress in the areas related to global outsourcing would have a significant impact on the welfare gains expected from the increased participation of developing countries in trade in services.

Policy conclusions and recommendations

22. It was pointed that outsourcing through offshoring was a win-win situation for both the offshoring and the recipient firms (countries). Most developing countries benefited commercially from being recipients of offshored outsourcing activities. Such benefits also contributed directly to the implementation of certain MDGs, especially poverty reduction and gender empowerment. Several developing countries, and particularly LDCs, emphasized their interest in capturing part of the market for outsourcing, but at the same time mentioned their constraints in terms of resources and capacities.

23. The following elements of a successful strategy were suggested:

- *To foster and create an enabling environment* for outsourcing activities domestically. Particular attention needed to be paid to infrastructure development, skilled and disciplined personnel, taxation schemes, legal framework and political stability.
- *To maximize the role of private–public partnerships*. Governments had a key role in levelling the playing field and in providing adequate legal infrastructure, stability and predictability in partnership with industry associations.
- *To provide policy support in related areas.* Likewise, supportive policies in such areas as education, technology development and transfer, and incentives were required.
- *To sustain competitiveness* — by moving from merely providing human resources and infrastructure to managing those resources, making constant efforts to move up the value chain, and exploring potentials in new offshoring activities.
- *To identify niche markets*. This was particularly important for new entrants, which might find it more difficult to penetrate markets where established service suppliers had already created a strong presence. Crucial to creating one's niche was the ability to identify one's competitive edge relative to other players, such as language, work

ethics, educational strengths in relevant subject areas, familiarity with the culture and practice of the outsourcing firm, and adaptability.

- *To intensify South–South cooperation*. Developing countries that had been successful in the field could share their experiences and best practices with other developing countries. Success stories could be replicated in developing countries in a relatively short time if an educated workforce and a competitive telecommunication infrastructure were present. In this context, the work of the World Summit on the Information Society was emphasized, including two of its projects, namely the Kofi Annan Centre for Communication and Technology and the initiative for satellite connectivity in the African countries.
- *To actively seek and utilize support from all donors, including NGOs.*

24. Mindful of the enormous potential of the offshore outsourcing market for many developing countries, the Expert Meeting proposed the following actions which may be considered as appropriate:

- *UNCTAD should complement its analytical and intergovernmental work with capacity-building activities, and consider a programme of seminars/workshops ("road shows") in selected countries*, which would help to:

    - Identify and assess the capabilities of countries in terms of available resources, skills and infrastructure (actual conditions);
    - Undertake diagnostic studies on sectors and areas where countries would need assistance (needs assessment);
    - Provide technical advice on how to best improve countries' capabilities;
    - Identify constraints in key offshoring markets;
    - Undertake advocacy work for keeping offshoring markets open.

- *The developing countries concerned should identify and actively seek sources of funding for building a key infrastructure necessary for offshore outsourcing*, including skills training. External financing was especially important in setting up the basic infrastructure, including through self-contained technology parts and clusters, the private- sector provision of which might not be commercially viable or attractive. An innovative mix of donor support and private–public partnership would be called for.

- *Special consideration should be given to the plight of LDCs*, especially to their dire need for support in building essential infrastructure as a basis for diversification and improving their competitiveness.

- *Existing frameworks of cooperation and coordination among international agencies should be appropriately exploited*. For example, the Integrated Framework could be a means by which trade-related aid could be channelled. Several UN agencies had projects related to ICT development, and an integrated approach could further improve the effectiveness of such projects.

- *Issues related to better market access and reduced barriers* to global outsourcing should be addressed in the ongoing GATS negotiations, including locking in opening of market access for cross-border supply of services in areas of particular importance

to sustaining the growth of global outsourcing; finding ways of addressing challenges related to classification, namely of computer-related activities; and making progress on issues related to GATS Mode 4 liberalization in addressing visa, administrative and other regulatory issues, including on recognition issues, to ensure effective liberalization of trade in services related to global outsourcing.

II. Renewable energy products, including bio-fuels

(a) Renewable energy products

25. Surging energy prices and price volatility, soaring demand and imports in some large economies, and environmental considerations are the main factors driving development, investment, production and trade with respect to renewable energy (RE) products. Some estimates pointed to a dramatic increase in RE — up to 9 per cent in total primary energy supply in 2030. Although RE was increasingly regarded as a merit good, it was not expected to replace non-renewable sources of energy. Developing countries would need to approach this matter from the point of view of economic and environmental imperatives, and the need to diversify their energy portfolio.

26. The value of trade in RE goods is still relatively low — according to the OECD estimates, in the range of $4 to $5 billion.[1] Developed countries dominate the high-technology end of exports. However, on the low-tech side and in bio-fuels, developing countries are major exporters. UNCTAD's earlier analysis has shown that for renewable energy equipment and technologies, developing countries' trade is in balance. There is even some foreign investment by developing countries. Global investment in renewable energy not including hydropower amounted to $50 billion in 2003.

27. For developing countries, including LDCs and African countries, RE offers opportunities to reduce dependence on fossil fuels. It also has the potential to increase agriculture-based exports of bio-fuels such as ethanol and vegetable oils, thus augmenting agricultural export revenues. A number of developing countries, such as Brazil, China, India, Malaysia and South Africa, have large domestic markets and significant export potential for RE. Also notable as exporters are Mexico, Thailand, the Philippines, Indonesia and Uruguay.

28. A stronger renewable energy market could have important implications for both developed and developing countries. Indeed, countries and regions in South America, Europe and Asia have set themselves new goals for increasing the use of RE. While the main drivers for renewable energy in developed countries lie in environmental protection, particularly the role that renewable energy can play in meeting greenhouse gas reduction targets, in developing countries it is the shortage of energy that is the main factor. Whatever the primary reasons are, there is little doubt that RE products represent multiple win-win options. They permit development and growth, especially in remote rural areas.

29. RE products also play an increasingly important role in some large traditional energy-producing countries. For example, the Russian Federation aims to triple its hydropower by 2010. The current target — to increase total RE from 6 per cent to 10 per cent each year until 2010 — is conservative, and the Russian Federation hopes to exceed that figure. Bio-energy

[1] Because of the lack of specificity in the Harmonized System, and the dual-use problem, it is not possible to provide an accurate estimate.

is considered a key issue. Adequate funds from the federal budget and further work on technology standards are under consideration.

30. Renewable energy competitiveness is dependent on three factors: (a) the availability of renewable resources, which are distributed remarkably unevenly around the world; (b) the technological maturity of the technology, with different renewable technologies presenting different competitiveness pictures; and (c) the conventional alternatives, primarily fossil fuel and nuclear energy, and particularly their costs, and whether or not these conventional costs are subsidized. The International Energy Agency has taken the position that RE technologies should be promoted without picking winners, so that technologies evolve on the basis of their contribution to the economic, security and environmental performance of the energy sector — the three critical conditions that would need to be improved simultaneously on the path to sustainability.

31. So far, RE deployment policies have been dependent on national policies, which are holding back their further development. As a result, RE technologies, particularly their second generation (wind, solar and new bio-energy) tend to be concentrated in a few countries.[2] For instance, as regards wind energy, 85 per cent of total world production is accounted for by five countries — Germany, Spain, the United States, Denmark and India — and 86 per cent of photovoltaic systems are accounted for by three countries — Japan, the United States and Germany. This is symptomatic of a challenge and a barrier, which can be dealt with through the internationalization of deployment strategy, especially since the above-mentioned countries are starting to reach saturation point on land, with some countries moving offshore.

32. The liberalization of the energy sector also calls for new ways of bringing new technologies to the market. It is imperative to break out of this trap of having just a handful of countries sharing the burden of technology deployment. This would require avoiding the creation of multibillion dollar industries where investment is more dependent on high tariffs, subsidies and preferential public procurement than on advantages in lower production costs, natural resources and superior know-how. It would also require expanding the number of countries that are working together, with a consequent sharing of the cost burden of deployment policies.

33. Developing countries offer two very substantial assets with regard to the competitiveness of RE: regions with very large renewable resources and, in many cases, lower costs for the production of equipment and components. Taken together, these two factors point to considerable scope for cooperation between developing and developed countries. Such cooperation will be increasingly important, since the more mature RE technologies — hydropower and geothermal biomass combustion — are reaching "pre-saturation point" in developed countries.

34. Trade and trade policy will play an increasingly important role in an international strategy for RE. Six-digit Harmonized System sub-headings now seem to be available for all major types of renewable energy technology in the market place. In the case of technologies for which a significant commercial market has not yet emerged — for example, geothermal power systems and components, large-scale solar-thermal power plants and wave-power or

[2] First-generation RE technologies were bio-fuels, hydro energy and geothermal energy.

OTEC (ocean-thermal energy conversion) — the prospects of creating unique sub-headings are constrained by the threshold required by the World Customs Organization.

35. India's experience in adopting an international strategy for RE could be instructive for other developing countries. It offers qualified manpower to produce quality goods, reduction of production costs by 10–15 per cent, and relatively low labour costs and production overheads. Two companies specializing in wind energy, two in solar photovoltaic energy and one in solar thermal energy have made India an export hub. There are problems, however: the high cost involved in technology transfer, the higher rate of working capital involved and higher freight charges, non-recognition of Indian testing standards, the high cost of overseas market development and the lack of national brand equity.

36. Morocco and other countries in the Mediterranean have chosen RE for concerted action at the regional level within the framework of the Renewable Energy Financing in the Mediterranean Region Project (MEDREP). This regional initiative includes sectoral trade liberalization for renewable energy.

37. As trade in RE begins to thrive, it is opportune to identify market access conditions and barriers embedded in trade policy and the international trading system. There is a great disparity in the customs duties of more than 100 countries — from 0 to 40 per cent and in some case 100 per cent — and it is the tariffs in the 20–40 per cent range that constitute the most intractable problem. Protectionist trade is not the way to generate benefits from sharing in the growth in renewable energy. It is much better to promote arrangements to manufacture systems or components that are part of the infrastructure for RE in the market place. On the other hand, the role of higher tariffs in attracting foreign direct investment and technology should not be overlooked.

38. The negotiations on environmental goods conducted under the mandate provided for in paragraph 31 (iii) of the Doha Ministerial Declaration may, in an optimistic scenario, lead to the reduction or elimination of tariffs on some classes of goods that are used for, or otherwise involve goods, with improved environmental performance. RE technologies might be considered within such a group. Indeed, several are already included in the negotiating proposals. In this context, the opinion was expressed that finished products should not be included in the positive list for tariff reduction or elimination: rather, efforts should be made to break down the various categories of equipment into specific components. High-technology machinery for the manufacturing of RE goods should also be considered, although these may pose the problem of dual use. The negotiations should take a balanced view of both tariff and non-tariff measures, and also maintain the spotlight on technology transfer.

39. Non-tariff measures that affect the goods and services that are *inputs* in the production, distribution, transmission and sale of electrical energy often *arise from* the regulatory framework for electricity itself, even though it is trade in the *inputs* that is of concern, and the electricity itself is not being traded across borders as a "commodity". For instance, if the regulatory framework for electricity requires that a certain percentage of electricity fed into the grid be renewable energy, and provides that only certain sources or generation methods qualify, this will affect competitive opportunities for those goods (technologies, equipment and fuels) and services that are involved in the production, distribution, and so forth, of renewable energy.

40. With the demonopolization of electricity, and the unbundling of functions such as generation, grid operation, transmission and retailing, as well as the development of financial instruments such as futures and options contracts for energy, the structure of the entire market is starting to change, thus complicating the analysis under WTO law. It is therefore important to examine whether government policies to *promote* renewable energy may be disciplined as non-tariff measures, and if so, to what extent. Another question is whether WTO law could be used to challenge or discipline policies (regulatory barriers) that *disadvantage* renewable energy, and if so, to what extent.

41. Technical regulations may constitute barriers to developing countries' exports of RE, and this needs to be addressed. Some technical regulations that create obstacles to trade in renewable energy or renewable technologies are necessary for legitimate objectives. For example, limits on the siting of wind turbines may well be motivated by legitimate concerns about the risks to wildlife, especially birds. Other regulations may be designed intentionally or inadvertently on the basis of the traditional predominance of fossil fuels or nuclear generation, and the dominance of industry representatives from those sectors in the regulation and standard-setting process. There may be instances where bio-fuels or substances that compose bio-fuels receive regulatory treatment which is based on assumptions that they are being traded as waste or for use in functions other than the production of renewable energy that may make the substances more hazardous.

42. Research and development spending for RE mainly by developed countries is paying off in that the technology costs are now falling. It is important to ensure that developing countries are able to benefit from these falling costs. At the same time, these subsidies indicate the role of industrial policy and the importance of "levelling the playing field" for developing countries. Most developing countries do not have adequate resources to support research and development. Availability of external resources and use of economic incentives and trade policy instruments could help bridge the resource gap.

43. Subsidies for oil, coal gas and nuclear power are often cited as a very significant barrier to renewable energy. Many of these subsidies could fall into the “actionable” category, depending on their exact characteristics, which would have to be analysed on the basis of the framework in the WTO Agreement on Subsidies and Countervailing Measures. As a general matter, one may question whether WTO litigation would be a realistic option for challenging such subsidies: Governments might be reluctant to deploy legal arguments that could result in challenges to their own support programmes.

44. There are certain other factors complicating developing countries' participation in the RE markets: the complexity and uncertainty of the regulatory environment, unproven technologies for regional needs (e.g. available equipment too large or too sophisticated), gaps in infrastructure, front-loaded investment needs, very limited availability of long-term loans (more than seven years), limited cross-border financing opportunities (e.g. because of loss of tax incentives), the relatively heavy burden, especially for small projects, of due diligence and monitoring requirements, and drawbacks in the tender process, which at times may create non-tariff barriers to trade.

45. A more promising approach would be to attempt to have negotiations within the WTO with a view to Members agreeing to cap and reduce subsidies that are environmentally unfriendly in the energy sector. Such negotiations might also address themselves to the task of identifying a set of “green box” renewable energy subsidies that Members agree to refrain

from challenging, on account of consensus as to their positive environmental effects. A broader and much more speculative question is whether such negotiations could be linked to the fulfilment of commitments under multilateral environmental agreements.

46. International regimes may also pose problems for renewable energy through the imposition of administrative burdens, or by forbidding or constraining the use or transport of some elements of renewable energy. For example, how will international agricultural agreements affect the growth of fuel farming and bioenergy in general? Another issue is to what extent regulatory and legislative regimes recognize metals as distinct from synthetic chemicals, and thus not to be viewed as "persistent, bio-accumulative toxins". How metals are classified is significant, since it will determine the weight of the administrative burdens that international regimes place on photovoltaic manufacturers and biomass companies, with the possibility of biomass fuel being described as hazardous waste.

47. Official development assistance targeting climate-positive technologies may play a catalytic role in the uptake of renewables in developing countries through increased trade, investment and technology transfer. Germany sets an example by spending 100 million euro a year on bilateral cooperation in renewables with developing countries and economies in transition. At the 2004 International Conference on Renewables, it announced an additional facility for credits and loans for renewables and energy efficiency purposes in the amount of 500 million euro over a five-year period. These funds are intended to play a catalytic role in increasing the flow of private investment into the sector, and cover a wide range of countries, such as China, India, the Lao People's Democratic Republic, Viet Nam, Ghana, Mali, the United Republic of Tanzania, Morocco, Argentina, Brazil, Nicaragua, Georgia, and Serbia and Montenegro.

Recommendations

48. With regard to UNCTAD's role in this area, the Expert Meeting proposed that the following major elements of UNCTAD's work in the area of trade, environment and development be considered:

(a) To provide assistance to developing country members in identifying tariff and non-tariff barriers affecting trade in renewable energy goods and equipment, and in positioning renewable energy goods, services and technologies in the negotiations under the mandate provided for in paragraph 31 (iii) of the Doha Ministerial Declaration;

(b) To continue analysis of the implications of trade and environmental regimes for the RE markets, with special reference to technical barriers to trade, subsidies and government procurement;

(c) To review the various approaches to developing an international strategy for renewable energy, with special reference to business models and incentive practices that have proved instrumental in bringing developing countries into a partnership to build new markets for renewables; and

(d) To maintain and strengthen coordination with relevant international organizations.

(b) Bio-fuels

49. In contrast to many renewable energy products, which require sophisticated industrial processes, technology and investment, bio-fuel production is anchored in the primary sector and uses local technologies that are easily transferable to the poorest.

50. It was noted that bio-fuels utilize plants that are already cultivated in all countries. The technology for agricultural production is well known. Sugar from sugar cane or beets, potatoes, corn, wheat, sorghum and wastes from other plants, on the one hand, and oil from all kinds of oil seeds (edible or not) on the other hand, are the primary bio-fuel raw materials. The technologies for production of bio-fuels range from simple ones, such as filtering oil with coffee filters, to more advanced industrial processes for production of ethanol, bio-diesel or ETBE (a fuel blended with gasoline). Bio-fuels are easily used as a source of fuel for vehicles, heaters or power generators. Compared with fossil fuels, they have indisputable advantages in terms of their energy ratios (the total energy consumed to produce one unit of energy) and environmental impacts (five times fewer greenhouse gas emissions and drastically reduced emissions of other pollutants). However, production costs are often too high for bio-fuels to compete with fossil fuels. The commercialization of by-products from bio-fuels production is a way to reduce the gap in costs. Promotion policies such as fiscal incentives for bio-fuels are often necessary for developing production and promoting consumption. This is more the case for ethanol than for vegetable oils.

51. International trade in bio-fuels is mostly confined to ethanol, which is by far the most widely used of the bio-fuels (93.5 per cent of total bio-fuels produced). However, vegetable oils have the largest potential for growth. International trade of bio-fuels is concentrated, with transnational companies and larger developing countries being the main actors. The prospects for bio-fuel trade are also limited by two factors: first, energy consumption grows exponentially with population, while feedstock grows in linear fashion; and second, available arable land is a limiting factor (for example, replacing all fossil fuel consumed in France in 2003 would require twice the area of the country, without leaving any space for food production). However, the experience of Brazil clearly shows that it is worth going into bio-fuels, and it is easy for developing countries to calculate how far they should go, on the basis of their oil consumption and feedstock reserves.

52. It was noted that Brazil has had 25 years of experience with bioethanol, mainly produced from sugar cane. It is currently by far the largest producer and user of bioethanol. Bio-fuel use has had environmental and social benefits and has lessened dependence on imported fuels (this was the original reason for starting the programme). International trade is seen to offer opportunities, either with other developing countries or with developed ones. However, there are considerable barriers to international trade: agricultural production subsidies, high tariffs, entry barriers (car manufacturers' recommendations for bio-fuel blends vary according to countries, with no limit on ethanol content in Brazil, while it is excluded in European countries). Moreover, a large part of research budgets internationally are oriented towards the development of "clean fossil fuels". With respect to WTO negotiations, trade liberalization for bio-fuels in the context of environmental goods and services should be facilitated by the absence of technical or environmental reasons for limiting their use. The entry into force of the Kyoto Protocol will oblige participating industrialized countries to reduce their carbon emissions, and this will provide a clear incentive to increase consumption of bio-fuels. Moreover, the Clean Development Mechanism (CDM) provides parties with the

opportunity to fund projects resulting in carbon emission reductions, while receiving credits for these reductions.

53. Although the greatest opportunities are limited to countries with sufficient feedstock, bio-fuels provide the possibility of reducing developing country oil imports. For many countries, access to a local power source is more important, since this provides an opportunity to pursue a distributed energy strategy, especially when using vegetable oils. In agriculture, bio-fuels offer farmers the possibility of diversifying sources of income and benefiting from all the advantages of diversification. Local or regional trade in bio-fuels can grow rapidly because marketing chains already exist, especially for vegetable oils. Bio-fuels technology is easy to transfer and diffuse because, for vegetable oils in particular, there is no need for the complex industrial processes used in the production of other kinds of renewable energy (wind turbines, photovoltaic panels or solar panels, for instance).

54. It was agreed that bio-fuels are definitely beneficial for rural development and can make significant contributions to achieving the Millennium Development Goals, particularly the poverty goal. Local communities growing oilseeds and producing their own bio-fuels to run power generators can gain independent access to power, thus improving the quality of life. Moreover, deforested areas can be recovered and restored for bio-fuel cultivation; this limits the use of firewood, which is associated with health hazards. Rural employment may increase significantly, as in the case in Brazil, where ethanol production generated 700,000 direct jobs and 3.5 million indirect jobs, mainly in sugar cane production.

Policy conclusions and recommendations

55. The need for more quantitative analyses was noted, taking into account possible limiting factors such as water resources and the interaction with agriculture for food cultivation in terms of arable land availability. The need for LDCs to be given access to the relevant technology was emphasized, and it was suggested that UNCTAD devise new mechanisms for technology transfer, commercialization and innovative financing, similar to the CDM. Also, it was stressed that an environment favourable to private sector initiatives in the bio-fuels sector should be created in developing countries and that the role that Governments should have in designing adequate promotion policies for production, use and local trade of bio-fuels should be defined. In addition, it was noted that bio-fuels trade raised several issues that were relevant to ongoing WTO negotiations.

56. The development of production methods for bio-fuels has historically been spurred partly by the need to find new outlets for surplus agricultural production. While this has resulted in rapid technological development, it is now important to place bio-fuel production in a new perspective. Environmental imperatives — and most important, the prospect of global climate change — dictate that the full potential of bio-fuels must be realized. For this to happen, the dynamic force of international trade has to be used to provide the growing markets and the incentives to investment that are necessary.

57. It was recommended that UNCTAD give priority attention to work on bio-fuels as part of its work on commodities, biotrade and climate change, including further research, analysis, technical cooperation and consensus building. The focus should be on emerging trade and investment opportunities for developing countries, implications for poverty reduction, supply-side constraints on expanding production, use of and trade in bio-fuels and promotion of new investment mechanisms similar to the CDM. In this context, UNCTAD

should assess the trade competitiveness of developing countries in the growing worldwide use of and trade in bio-fuels, as well as market access and market entry issues related to imports of bio-fuels in industrialized economies.

III. Textiles and clothing

58. The textiles and clothing industry is a mature sector, but it will continue to be a dynamic sector driven by demand, change in demography, increasing living standards, and emerging opportunities for innovation, diversification and niche-product development. This is the area where developing countries have a comparative advantage, and it contributes significantly to poverty reduction, employment creation, and skill and economic development in those countries.

59. During the last two decades textiles and clothing constituted the second most dynamic product in world trade. Global trade in textiles and clothing totalled $390 billion in 2003. The sector is highly important for developing countries, which supply about 50 per cent of the world market for textiles and over 60 per cent of the world market for clothing. Since 1980, clothing exports from developing countries have increased by a factor of 7 and textile exports by a factor of 5, while the corresponding factors for developed countries were 3 and 2 respectively.

60. The major importers of textiles and clothing are the United States and the European Union (EU), which accounted for 22 per cent and 36 per cent (including EU intra-trade) of world imports, respectively, in 2003. China, India, Pakistan, Indonesia and Thailand were the developing countries among the top 20 world textile exporters, while for clothing exports China, India, Bangladesh, Thailand and Pakistan were among the top 20 countries. Also, contrary to the belief that textiles trade is dominated by developing countries, the United States and a number of EU countries led by Italy, Germany, France, Belgium and others continue to play leading roles in both textiles and clothing trade.

61. In the environment prevailing after the phasing out of all the quota restrictions on textiles and clothing trade in the Agreement on Textiles and Clothing (ATC), competition will intensify, and exporters of textiles and clothing will be subject to heavy pressure to cut prices. However, at the same time, the post-ATC environment provides opportunities for exporters to exit from the quota-captive markets, where competition is intense and profit margins are often low, and to diversify into dynamic products that are different from textiles and clothing products on account of their higher valued-added and profit margins. Thus, in the post-ATC competition environment, identifying dynamic products and diversifying into them are all the more important for developing countries exporting textiles and clothing.

Dynamic products in the context of trade in textiles and clothing

62. There was a general consensus that dynamic products in the textiles and clothing sector would vary from country to country and from market to market, and that the parameters for defining dynamic products would be demand, market access and profit margins. Lifting of quota restrictions has made almost all cotton and man-made fibre product lines potentially dynamic. Identifying a dynamic product would be a matter of national and enterprise strategic engineering of niche products through diversification and specialization in the production value chain. Man-made fibre products have particularly significant prospects since the demand for them exceeds supply by about 250,000 tons a year.

63. Textiles and clothing products for which quota-fill rates were high during the quota-restriction period of the Agreement on Textiles and Clothing, for example cotton and man-made fibre garments, will be dynamic products for the highly restricted countries. Moreover, in the area of traditional product lines small and medium-sized enterprises are investing in order to follow the trend of "forum shopping", whereby manufacturers buy inputs such as yarn, fabric and accessories from the most cost-effective suppliers instead of manufacturing them in-house. Subsequently, these enterprises are increasingly diversifying into specialized products such as textile accessories, linings, ethnic textiles and special fabrics in order to capture the market niche that has emerged under the "forum shopping" system.

64. Technical textiles, which are used for a wide range of areas such as medicine, environment, agriculture, construction, transportation and sport, are growing in terms of demand and profitability. Most major textile manufacturers in the developing countries are already engaged in rapidly acquiring expertise in technical textiles. The industry forecasts that the world market for these textiles will increase by 3.5 per cent a year in volume terms, reaching a value of $126 billion by 2010. Also, demand for products with anti-microbial finishes are growing. Examples of such products are anti-microbial-treated cotton T-shirts and trousers. Demand for ethnic textiles is growing in both the North and the South markets, where the principal suppliers are India, China, Cambodia and Turkey. China is one of the most potential dynamic markets for niche products, where a huge demand is expected for cotton yarns, technical textiles, and industrial and tire cord yarn.

65. In the post-ATC competition environment, where there is not a quota-secured market, dynamic products offer great potential for developing countries to diversify into higher-value-added products, to differentiate their products from those of their competitors, and to generate greater profit margins. For LDCs and small countries which might be affected by post-ATC competition, dynamic products could provide new export possibilities since they do not necessarily require large investments, while at the same time providing opportunities for increasing value added and developing niche markets.

Competitiveness factors for dynamic products

66. Success factors are productivity, quality, creativity, innovation, speed, reliability, the ability to meet social, environmental and security requirements, market access and an enabling domestic environment. Also, attaining competitiveness will require an increase in efficiency in the whole supply chain management. Moreover, to identify niche products and increase value added, firms need to understand the value chain of textiles and clothing production. Tariffs and non-tariff barriers are highly relevant to market access, but subsidies and exchange rates also affect market access.

67. Proximity to the market, which can result in faster turnaround times, is an important success factor, particularly for seasonal, fashion-oriented and quick-turnover products. For example, suppliers in Mexico, which usually take approximately two days to ship to the United States, have a significant advantage as opposed to suppliers in Asia, whose average shipping time is about 28 days.

68. Preferential market access in the major importing countries in the context of regional trade agreements may, under certain conditions, provide significant advantage to exporters in preference-receiving countries, given the relatively high tariffs imposed on textiles and clothing.

Challenges and constraints: What firms have to do

69. Textiles and clothing firms are required to make intelligent decisions on business strategies for diversification and specialization in order to counter the price wars foreseeable in the ordinary cotton and man-made fibre product lines. This is particularly relevant for firms that would be seriously affected by the post-ATC competition environment. The main advantage for firms in tapping the market for dynamic products is that diversification into these products or specialization in them does not necessarily require huge investments.

70. Other challenges that textiles and clothing firms need to meet in order to maintain competitiveness are proper use of technical, social and environmental standards, having flexible and efficient production lines, and training of workers and middle and upper managers. Technology upgrading at the stages of ginning, production monitoring, spinning, weaving, dyeing and garmenting is a key aspect to meet these challenges. The availability of financial resources is crucial if firms are to maintain competitiveness.

71. Exporters of textiles and clothing need to seek collaboration with buyers in setting standards to benchmark international standards, and to establish local indigenous standards. Such collaboration could be achieved by means of joint product development through sharing the management of production and logistics. Also, textile manufacturers in industrialized countries are endeavouring to innovate their products, and are looking for partners to fill the gaps they have in increasing competitiveness, which could come from developing countries.

72. Firms are required to meet performance requirements regarding social and environmental conditions. Even a supposedly voluntary practice such as eco-labelling is becoming a de facto requirement. Initiatives to tighten performance requirements, such as Worldwide Responsible Apparel Production, the Apparel Industry Initiative and the Clean Clothes Campaign, are growing trends. The optimal approach to dealing with performance requirements would be to incorporate them into localized indigenous compliance programmes rather than treating them as imported buyer requirements. The market preference for eco-labelled products is also expected to force manufacturers and producers to redesign their products, packages and processes in order to make them more environmentally acceptable.

73. Companies are working to integrate accountability at the board level, which will lead to changes in who serves on the board, how directors handle social and environmental issues, and how the board manages itself and fulfils its responsibilities to investors and other stakeholders. However, firms often have difficulties in meeting performance requirements since conditions are imposed unilaterally without consideration of local and regional specificities. With regard to the environmental aspect, UNCTAD has been working in the context of environmental measures affecting textiles and clothing, and with regard to social conditions, the International Labour Organization has started pilot projects in a number of developing countries.

74. After the events of 11 September 2001, security compliance under the Trade Partnership Against Terrorism Law has become another challenge for textiles and clothing exporters in developing countries, as it involves lengthy and complicated procedures, as well as high costs.

Strategies at the national level

75. Given the special structure of textiles and clothing created by the quota system, some adjustments in the textiles and clothing sector are inevitable. However, optimism was expressed that even for small countries that could be affected by the lifting of quotas, basic requirements for competitiveness exist, and that if adequate financial resources are available to upgrade technologies and train workers through, for example, preferential rate loans, firms could maintain competitiveness.

76. To support firms' endeavours to maintain competitiveness, reform of domestic labour laws might be necessary in order to increase flexibility in employment while enforcing international labour standards.

77. Regulations affecting the competitiveness of dynamic products need to be reformed. In this respect, those on energy, telecommunications, transportation, electricity and preferential treatment for specific products at the expense of potential dynamic products are particularly relevant.

78. Enforcement of laws on intellectual property rights is necessary for the protection of traditional artistic expression and promotion of niche markets. It is also important for attracting foreign investment and buyer interest.

79. Other national measures required are investments in infrastructure to support efficient trade logistics, the construction of dry ports, the creation of export processing zones, the provision of financial incentives (grants, loans or tax relief) to improve competitiveness, the removal of bottlenecks that result in delays in shipping and customs clearance, and the abolition of export duties and other taxes. Active business advocacy to sensitize Governments about the needs of enterprises is essential.

80. Being certified by the Governments of major importing countries for labour standards, which is Sri Lanka's case, for example, vis-à-vis the EU's Generalized System of Preferences (GSP) labour standard, increases the bargaining power of textiles and clothing exporters against importers that impose private codes of conduct. Also, developing countries could learn lessons from the Japanese experience in the adjustment of its textile industry.

Strategies at the international level

81. On the multilateral and plurilateral trade policy front, several issues were raised. Trade in textiles and clothing is still subject to considerably higher tariffs than other industrial goods, and these tariffs are therefore serious barriers to textiles and clothing exports. Preferential rules of origin on textiles and clothing are discriminatory in respect of exporters of the products in countries that do not participate in regional trade agreements. Countries that have regional trade agreements with the EU and the United States have to use inputs from the two partners to benefit from preferential market access unless they can use input from the region concerned. The restrictive rules of origin are also a serious constraint for "forum shopping".

82. Countries that would be seriously affected by the lifting of quotas need substantial technical and financial assistance from bilateral and multilateral donors for enhancing supply capacity and developing forward and backward linkages in their textiles and clothing

industries. Special problems faced by LDCs, including the landlocked ones, need to be taken into account in helping them adjust to the post-ATC environment. The lack of alternative sectors to absorb displaced workers is a particular problem for those countries. The international community and bilateral donors need to provide adequate assistance through existing mechanisms such as the International Monetary Fund's Trade Integration Mechanism and new initiatives such as the Trade Adjustment Fund recently proposed by the EU. Also, to extend duty-free access to textiles and clothing from all LDCs, it is crucial to assist these countries in the post-ATC context.

83. Developing countries that are entitled to preferential access to the markets in the major importing countries often have low rates of preference utility because of the restrictive preferential rules of origin. Flexible rules of origin are necessary if these countries are to benefit from preferential market access, and in order to promote South–South cooperation. In this light, application of the "single transformation" rule, interpretation of transformation, and cumulation at the subregional, regional and interregional levels are of particular importance. Developing countries expressed the hope that the new EU GSP scheme would adopt user-friendly rules of origin.

84. To allow competitive textiles and clothing firms to grow in the post-ATC phase, the introduction of new protectionist measures must be avoided. Also, obtaining adequate provisions for technical and financial assistance in the ongoing WTO negotiations on trade facilitation is necessary in order to enhance trade logistics in developing countries.

85. As regards social and environmental requirements, Governments, the international community and non-governmental organizations need to endeavour to ensure that these are not imposed for protectionist reasons, and to establish balanced requirements that take into account cultural diversity and local specificities in developing countries.

86. The concentration of the textiles and clothing market in the major importing countries is making retailers very powerful. Exporters of textiles and clothing in developing countries often face uneconomical demands by these retailers. It is therefore necessary to examine the problems that exporters face in this respect and to identify ways to deal with them.

87. South–South cooperation could play an important role in increasing trade in dynamic products, as well as in technology upgrading, as shown in the case of the joint venture agreement between China and India. There is a need for an advisory service at the international level which could be made available to textiles and clothing manufacturers in developing countries with regard to the latest technological developments.

88. UNCTAD could play an important role in helping developing country Governments to pursue policy measures to strengthen their countries' participation in the manufacture of dynamic textiles and clothing products and in creating an international environment conducive to developing countries' achieving this goal. Specific areas suggested for UNCTAD assistance included:

(a) Identifying dynamic products, as well as the driving force of dynamism, and helping developing countries to participate in the trade of dynamic products;

(b) Monitoring the post-ATC situation in terms of trade patterns, market trends and impact on employment;

(c) Continuing to analyse the effectiveness of the non-reciprocal preferential agreements, particularly in relation to preference utilization and the rules of origin;

(d) Monitoring the development of regional trade agreements and analysing their implications, and particularly those of the rules of origin, for trade in textiles and clothing;

(e) Promoting South–South cooperation, such as the Global System of Trade Preferences among Developing Countries, in increasing developing countries' participation in the trade of dynamic products;

(f) Monitoring developments in labour conditions and analysing implications for the textiles and clothing industry in developing countries;

(g) Identifying competitive textiles and clothing sectors in developing countries and helping them in countering a perceived "country risk";

(h) Monitoring signs of protectionism in the sector;

(i) Examining the issue of market concentration in the major markets and analysing implications for exporters from developing countries;

(j) Calling for a coherent trade adjustment support programme and donor support for enhancing supply capacity; and

(k) Examining success stories concerning the attracting of foreign direct investment in the textiles and clothing sector in LDCs, including African cotton-producing countries, and increasing value added, and advising countries that wish to formulate policy measures to attract foreign direct investment which could benefit from preferential agreements such as the African Growth and Opportunity Act and the Everything But Arms initiative.

Chapter II

ORGANIZATIONAL MATTERS

A. Convening of the Expert Meeting

89. The Expert Meeting on Strengthening Participation of Developing Countries in Dynamic and New Sectors of World Trade: Trends, Issues and Policies was held at the Palais des Nations, Geneva, from 7 to 9 February 2005.

B. Election of officers

(Agenda item 1)

90. At its opening meeting, the Expert Meeting elected the following officers to serve on its bureau:

Chairperson:	H.E. Mr. Hardeep Puri (India)
Vice-Chairperson-cum-Rapporteur:	Mr. Patrick Pickard (Canada)

C. Adoption of the agenda and organization of work

(Agenda item 2)

91. At the same meeting, the Expert Meeting adopted the provisional agenda circulated in document TD/B/COM.1/EM.26/1. The agenda for the Meeting was thus as follows:

1. Election of officers
2. Adoption of the agenda and organization of work
3. Promoting participation of developing countries in new and dynamic sectors of world trade
4 Adoption of the report of the Meeting

D. Documentation

92. For its consideration of the substantive agenda item, the Expert Meeting had before it a note by the UNCTAD secretariat entitled "Strengthening participation of developing countries in new and dynamic sectors of world trade: Trends, issues and policies" (TD/B/COM.1/EM.26/2).

E. Adoption of the report of the Meeting

(Agenda item 4)

93. At its closing meeting, the Expert Meeting authorized the Rapporteur to prepare the final report of the Meeting.

Annex

ATTENDANCE *

1. Experts from the following States members of UNCTAD attended the Meeting:

Angola
Argentina
Bangladesh
Belarus
Benin
Canada
China
Denmark
France
Gabon
Ghana
Hungary
India
Iran (Islamic Republic of)
Iraq
Japan
Madagascar
Malawi
Mexico
Morocco
Nepal
Nigeria
Philippines
Poland
Qatar
Russian Federation
Samoa
Saudi Arabia
Sri Lanka
Sudan
Switzerland
Thailand
United Republic of Tanzania
United States of America
Venezuela
Viet Nam
Yemen
Zambia

2. The following intergovernmental organizations were represented at the Meeting:

African, Caribbean and Pacific Group of States
African Union
International Textiles and Clothing Bureau

3. The following United Nations agency was represented at the Meeting:

Economic Commission for Europe

4. The following specialized agencies and related organization were represented at the Meeting:

International Labour Organization
International Monetary Fund
United Nations Industrial Development Organization

* For the list of participants, see TD/B/COM.1/EM.26/INF.1.

5. The following non-governmental organizations attended the Meeting

General Category

BPW International
Focus on the Global South
World Federation of Trade Unions

6. The following speakers contributed to the Meeting:[1]

Monday, 7 February

Mr. Albert Kan-Dapaah, Minister of Communications & Technology, Ghana
Ms. Suani Teixeira Coelho, Deputy Secretary for the Environment, State of São Paulo, Brazil

IT-enabled outsourcing of services

Mr. Navdeep Suri, Ministry of Foreign Affairs, India
Mr. Malte Godbersen, World Economic Forum, Geneva
Mr. Rajeev Sawhney, HCL Technologies, London
Mr. Nigel Fretwell, Barclays, London
Mr. Daden Venkatasawmy, Board of Investment, Mauritius

Tuesday, 8 February

Ms. Elisabeth Tankeu, Trade Commissioner, African Union

Renewable energy: Trade as a factor

Mr. Rick Sellers, International Energy Agency, Paris
Mr. Mohammed Berdai, Centre for Renewable Energy, Morocco

Renewables in the international trading system

Mr. Robert Howse, Renewable Energy International Law Project
Mr. Chintan Shah, Suzlon Energy Limited, India

Promoting trade and development opportunities for renewable energy

Mr. Christoph Hoischen, International Financial Consulting Ltd.
Ms. Leslie Parker, Renewable Energy International Law Project
Mr. Michail Solovjev, Ministry of Energy, Russian Federation

[1] Names are in chronological order of speaking.

Bio-fuels

M. Jean-Claude Scholle, Université de Pau, France
Mr. Eric Gerelle, CTO IBEX, Switzerland
Mr. Daniel Ugarte, University of Tennessee, United States
Ms. Suani Teixeira Coelho, Deputy Secretary for the Environment, State of São Paulo, Brazil
Sr. José Manuel Tay Oroxom, Ex Ministro, Ministerio de Energía y Minas, Guatemala
Mr. Eric Herger, Biodiesel Factory, Switzerland

Wednesday, 9 February

Textiles and clothing

Ms. Huma Fakhar, Fakhar Law International & Market Access Promotion NTW Asia, Pakistan
Mr. Alfredo Milian, Central American and Caribbean Textiles and Apparel Council, El Salvador
Mr. Olivier Renaud Cua, Groupement des entreprises franches et partenaires, Antananarivo, Madagascar
Mr. T.S. Vishwanath, Confederation of Indian Industries, Geneva
Mr. Patrick Conway, University of North Carolina, United States
H.E. Mr. Toufiq Ali, Ambassador, Permanent Mission of Bangladesh, Geneva
H.E. Mr. Gyan Chandra Acharya, Ambassador, Permanent Mission of Nepal, Geneva
Ms. Indira Malwatte, Director─Product Management, Export Development Board, Colombo
Mr. Kiichiro Fukasaku, OECD, Paris
Mr. Munir Ahmed, International Textile and Clothing Bureau
Mr. Matthias Knappe, International Trade Center, Geneva
Mr. Jean-Paul Sajhau, International Labour Office, Geneva

7. The following invitees attended the Meeting:[2]

Mr. Hussein Abaza, United Nations Environment Programme, Geneva
Mr. Mohamed Azouagh, United Nations Environment Programme, Geneva
Ms. Nathalie Bernasconi, Centre for International Environmental Law, Geneva
Mr. Lino Gallo, Ecoplan SRL, Uruguay
Mr. Stefan Gsänger, World Wind Association
Ms. Susan Hainsworth, World Trade Organization, Geneva
Mr. Rob Hawthorn, Barclays, London
Ms. Andrea Hoyos, Lausanne, Switzerland
Ms. Meg Jones, Constructive Connections
Mr. Enga Luye, Belair technologie, Switzerland
Ms. Marcelo Mascheroni, CEO, Ecoplan SRL, Uruguay
Ms. Doaa Abdel Motaal, World Trade Organization, Geneva
Mr. Andrea Moyos, EPFL, Prilly, Suisse
Ms. Samantha Ölz, Energy Specialist, IT Power Ltd., United Kingdom
Mr. Manish Popli, Managing Consultant, IBM Switzerland, Geneva
Ms. Malena Sell, International Centre for Trade and Sustainable Development, Geneva

[2] Names are in alphabetical order.

Ms. Linda Siegele, Research Assistant, Renewable Energy International Law Project
Mr. Benjamin Simmons, United Nations Environment Programme, Geneva
Ms. Maria Socorro Z. Manguiat, Environmental Law Centre, International Union for Conservation of Nature and Natural Resources, Geneva
Mr. Rian von Staden, International Solar Energy Society
Mr. Ronald Steenblik, Organisation for Economic Co-operation and Development, Paris
Mr. Richard Taylor, International Hydropower Association