



American Model United Nations

Economic Commission for Europe

Report to the Economic Commission for Europe on Sustainable energy

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1 Executive Summary

2 The Economic Commission for Europe is pleased to present its report on the topic of Sustainable Energy to
3 the Economic and Social Council (ECOSOC). During its meeting this year, the Commission extensively discussed
4 topics related to sustainable energy. During its deliberation, the Commission devoted particular consideration to the
5 form that sustainable energy should take and to economic considerations.

6 The Commission considered all forms of energy during its discussions, paying careful attention to nuclear
7 energy sources, wind energy, solar energy and geothermal energy. The Commission also considered to what degree
8 Member States should focus on renewable energy resources as opposed to increasing energy efficiency for non-
9 renewable sources such as coal.

10 Representatives continued their deliberations by engaging in a discussion over the accessibility of sustain-
11 able energy. The Commission addressed the often prohibitive costs associated with developing sustainable energy
12 infrastructures, and discussed possible solutions, including ways to encourage investment and decrease trade barriers.
13 During these deliberations, the Commission considered that access to sustainable energy may be distributed
14 unequally among Member States, and that the Commission may have to discuss each Member State individually in
15 order to discover which forms of sustainable energy are best suited to each Member State.

16 The Commission divided into five subcommittees in order to more thoroughly discuss topics related to
17 sustainable energy. The Commission adopted several recommendations for action as a result of the work of the
18 subcommittees and the deliberations of the body. Resolution 2.1 recommends the creation of a body that will
19 research and propose state-by-state recommendations to facilitate transitions to more sustainable energy sources
20 and making existing energy networks more efficient. Resolution 2.2 recommends the creation of a database that
21 will match investors with sustainable energy projects. Resolution 2.3 addresses the issue of efficiency in energy
22 networks and recommends coal divestment strategies as well as an integrated European power grid as a long term
23 goal. Additionally, the body adopted recommendations for trade of sustainable energy and for the encouragement of
24 scholarships and university partnership programs in fields related to sustainable energy.

25 **Matters calling for action**

26 **ECE II/1**

27 *Alarmed by* the severe affects of climate change that are currently being experienced around the world,
28 *Having adopted* the Paris Agreement which sets out a global action plan to limit global warming below 2
29 degrees Celsius,

30 *Drawing attention* to the reality that fossil fuels will continue to provide the majority of energy for most
31 Member States,

32 *Recognizing* that the availability of various renewable and nonrenewable energy sources is regionally depen-
33 dent,

34 1. *Recommends* the finding of experts to create and present Member State-specific energy plans at next
35 year's session of the Economic Commission for Europe under the following guidelines:

36 (a) These experts would include top engineers, energy scientists, economists, anthropologists and
37 local experts;

38 (b) These experts would be drawn from a variety of Member States, with no less than two experts
39 chosen by the Member State that is under consideration for an action plan;

40 (c) The members would be drawn from a variety of Member States, both developed and developing,
41 to prevent bias;

42 2. *Further recommends* that individual energy plans be designed from four categorical templates:

43 (a) The first category would aid developing Member States with very limited or no preexisting energy
44 infrastructure;

45 (b) The second category would target developing Member States with preexisting nuclear infras-
46 tructure;

47 (c) The third category would consist of developed Member States with very limited or no preexisting
48 nuclear infrastructure;

49 (d) The fourth category would consist of developed Member States with preexisting nuclear infras-
50 tructure;

51 3. *Requests* that this team of experts make energy recommendations on two time scales:

52 (a) Immediate, short term recommendations for increasing efficiency of fossil fuels and current,
53 non-renewable energy sources;

54 (b) Long term recommendations for sustainable energy (including, for nations with existing ca-
55 pabilities, nuclear power) in cooperation with the International Renewable Energy Agency (IRENA) and similar
56 organizations.

57 **ECE II/2**

58 *Focused on* designing strategies and frameworks for allocating spending on infrastructure and energy devel-
59 opment,

60 *Reiterating* that many developing Member States have the neither the capital nor the expertise necessary to
61 begin this transition on their own,

62 *Acknowledging* the neccessity to create an open and viable international market for renewable and sustainable
63 energy,

64 *Focused on* designing strategies and frameworks for allocating spending on infrastructure and energy devel-
65 opment,

66 *Deeply disturbed* by the corruption and possible misallocation of investment funds,

67 *Emphasizing* that all Member States should be involved in a fair investment process,

68 1. *Calls upon* the Economic Commission for Europe to create and maintain a database to provide possible
69 investors with information that will be used to aid in investments in developing Member States' infrastructural costs
70 as identified by the Energy Infrastructure and Efficiency Committee of the Commission:

71 (a) *Urges* existing institutions such as the IMF, World Bank and the United Nations Development
72 Programme to utilize a low interest loan repayment schedule for the purpose of stimulating sustainable energy
73 development, with special focus on small and developing Member States;

74 2. *Involves* the Group of Experts on Energy Efficiency (GEEE) in the allocation and investment of funds for
75 sustainable energy:

76 (a) *Encourages* that the GEEE will provide consultation on sustainable energy policies and strategies
77 for Member States;

78 (b) *Emphasizes* that the GEEE can advise on policy recommendations to individual Member States;

79 3. *Urges* existing institutions such as the IMF, World Bank and the United Nations Development Program-
80 me to utilize a low interest loan repayment schedule for the purpose of stimulating sustainable energy development,
81 with special focus on small and developing Member States:

82 (a) In doing so support and facilitate a healthy degree of capital controls on creditor Member States
83 in order to prevent excessive speculation and other unstable borrowing practices;

84 4. *Further recommends* foreign investment tax reliefs to encourage investments in sustainable energy versus-
85 fossil fuels:

86 (a) *Encourages* that each Member State's central finance organization operates with the intent to
87 decrease trade barriers on importing and exporting sustainable energy equipments;

88 (b) *Recommends* governments with the cooperation of the private sector to create a tax relief op-
89 portunity for qualified foreign investors that will open factories for sustainable energy program;

90 5. *Affirms* that the program will remain exclusive to Member States of the Commission and will help the
91 Commission to better understand the successfulness of this attempt through research before sharing the technology
92 with the world market;

93 6. *Recommends* Member States increase investment in sustainable energy by 15% in 5 years.

94 **ECE II/3**

95 *Recognizing* the need to develop a more comprehensive energy infrastructure network throughout the regions,

96 *Acknowledging* that the period of transition from nonsustainable energy sources to more sustainable sources
97 has much potential for minimization of harmful emissions and byproducts,

98 *Noting* the need to emphasize efficiency in the construction of further power production facilities and infras-
99 tructure networks,

100 *Aware* of the global imperative to invest in further sustainable energy development,

101 *Further aware* of the opportunities for incentivization and profit within the region,

102 1. *Encourages* the development of a large-scale, integrated, transnational, regional energy infrastructure to
103 allow for transfer of produced energy among the Member States of the Economic Commission for Europe;

104 2. *Urges* Member States to consider the operating efficiency of such networks as being of great import to the
105 development of such networks;

106 3. *Recommends* that Member States and regional bodies work towards the eventual creation of a European
107 Integrated Power Grid Network to facilitate efficient transfer of energy on a transcontinental scale;

108 4. *Encourages* the development of a green energy marketplace for those nations participating in the integrated
109 grid to purchase and sell energy produced by Member States who produce excess energy;

- 110 5. *Recommends* Member States take advantage of this marketplace during their transitional period, to reduce
111 reliance on unsustainable or less sustainable energies, while they develop sustainable and renewable energy options;
- 112 6. *Emphasizes* the need for new energy production facilities to be operating in a clean manner:
- 113 (a) *Encourages* Member States to exclude coal options in future energy production expansions.

114 **Promoting Free Market Energy Exchange and Incentivizing Independent Energy De-** 115 **velopment**

116 The United Nations Economic Commission for Europe (UNECE) recognizes the necessity for Mem-
117 ber States to work with one another in fostering both a mutually beneficial energy network and a robust international
118 economy. It also recognizes that it is in every Member State's best interest to act rationally through the optimal and
119 efficient utilization of both limited and unlimited resources. The UNECE affirms the inherent diversity associated
120 with individual Member States determining their most suitable recourse in efficiently reaching their energy needs.
121 Similarly, it stresses the importance of working towards eventual energy independence in developing Member States,
122 which is catalyzed and enhanced by trade with energy-rich Member States.

123 Therefore, the ECE encourages collaboration between:

- 124 1. Member States with sustainable energy reserves that exceed their own identifiable energy needs
- 125 2. Member States with the inclination and means to partner with these Member States through the trade of
126 sustainable energy.

127 It also strongly suggests that the primary seller in the trade relationship offer its sustainable energy
128 resources to interested Member States at appropriate rates. Next, the Commission advises trading Member States
129 to negotiate timeframes that would limit such discounts to an agreed upon length of time, and that would become
130 non-negotiable after their final agreement. It justifies such a style of arrangement on the grounds that it fosters
131 international energy trade, and ultimately incentivizes Member States to develop domestic sustainable energy plants
132 without becoming excessively dependent on foreign sellers. Likewise, the UNECE supports the proliferation of
133 sustainable energy plants within either or both bilateral trade partners' borders in order to help develop a mutually
134 beneficial trade relationship.

135 In that same vein, the UNECE also discourages solutions predicated upon regulating or encouraging
136 regulation of domestic taxes and/or tariffs. It urges adherence to a general framework that facilitates such trade and
137 partnership, with the recommended model being such that Member States follow seven general guidelines.

138 The first guideline involves affirming any voluntary commissions that exist for the purpose of research
139 and recommendation on possible sustainable energy sources available to any particular nation based on its unique
140 set of natural resources. The second entails Member States assessing the possibility of necessary development
141 based on population and distribution of said citizens. The third involves Member States working towards the
142 development of a more efficient international energy structure. The fourth entails Member States retaining the
143 ability to reach out for international resources so as to better facilitate the creation, expansion and maintenance of
144 domestic energy infrastructure. The fifth encourages Member States to collaborate together with non-governmental
145 organizations (NGOs) to execute the work needed to start and complete projects commissioned by Member States.
146 The sixth emboldens Member States to implement safeguards that would allow for NGO-led sustainment of energy
147 infrastructure. The final guideline reiterates the importance of inviting Member States to encourage and provide
148 support to other Member States attempting to gain energy sustainability and independence.

149 The Innovation and Education Subcommittee recommends that the Economic and Social Council E-
150 COSOC consider the issue of educating individuals in developing Member States in science, technology, engineering,
151 and math (STEM) and renewable fields of study, because innovation in an area can best be stimulated through
152 education in the relevant area.

153 Specifically, the Subcommittee recommends the implementation of private and public scholarships,
154 internships, apprenticeships, exchange programs, and other such similar practices in the aforementioned renewable
155 fields between developing and developed Member States.

156 Recommended private mechanisms for use in implementing the above programs could include existing
157 universities and interested NGOs. Public institutions for use in implementing the above programs could include,

158 but not be limited to the following: individual Member State governments that subsidize students' educations and
159 existing United Nations bodies such as the United Nations Educational, Scientific, and Cultural Organization, United
160 Nations Children's Fund and the Group of Experts on Energy Efficiency.

161 The committee broadly encourages all possible forms of aid to students who study in the previously
162 mentioned fields.

Consideration of the Status of Sustainable Energy

Deliberations

Shrinking glaciers, rising sea levels and changing climates present an enormous challenge that necessitates a response from the international community. Agricultural industries around the world are particularly vulnerable to climate change, as it provokes changes in rainfall and seasonal patterns. Additionally, glacial melt, particularly when it occurs in proximity to lakes and rivers, can cause both flooding and droughts, which in turn lead to natural disasters that threaten both human and financial security. Researchers around the world agree that carbon dioxide emissions are the primary cause of climate change, and an international transition to sustainable energy may be necessary in order to mitigate the consequences of climate change. Representatives began their deliberations by acknowledging these challenges, and proceeded to discuss their potential solutions.

Representatives began their discussion of sustainable energy by expressing concern that sustainable energy may not be accessible for all states, especially in those states with developing economies. One representative proposed an initiative entitled Investment, Collaboration, Education (ICE) that aimed to reduce dependency upon fossil fuels among Member States within the Commission. The initiative highlighted the importance of collaborative investment into sustainable energy infrastructures in emerging economies. Several representatives expressed interest in the proposal. Another representative proposed a similar initiative entitled Efficiency, Capability, Organization (ECO), which aimed to increase access to sustainable energy through offering advisory and technical assistance services to developing countries. Other delegates expressed interest in providing assistance on a country-by-country basis, and emphasized the importance of considering the natural resources and technologies available within each country before deciding on the form sustainable energy investment should take. Some representatives communicated their trepidations in regards to renewable energy sources, stating that the prohibitively high cost of developing renewable energy infrastructures makes sustainable energy impractical for some countries. These representatives also articulated concern that the positions of Western States may have been overrepresented during the Commission's deliberations.

Many representatives conveyed their positions on various forms of non-renewable energy. Nuclear energy in particular proved to be a controversial topic for the Commission. Some representatives endorsed nuclear energy, and urged the Commission to consider nuclear power a viable energy source for developing Member States, arguing that not every country's available resources and economies would support renewable energy. Many representatives proceeded to express discomfort with nuclear energy, citing concerns related to both the environment and to international security. One representative countered the latter point by referencing the Iran nuclear deal framework, which was signed by many United Nations Economic Commission for Europe (UNECE) Member States. This representative pointed out that, if UNECE Member States were willing to compromise in the context of the aforementioned deal, then they should also be willing to achieve a compromise that would allow certain UNECE Member States to develop nuclear energy infrastructures. Some representatives proceeded to propose geothermal energy as a viable sustainable energy option, and encouraged the Commission to adopt energy recommendations specific to each country. Additionally, many representatives emphasized the importance of making energy use in countries more sustainable, not necessarily immediately fully sustainable. This allows for transitional phase recommendations including the use of natural gas and increasing energy efficiency, in power grids for example, in Member States dependent upon fossil fuels.

The Commission also deliberated extensively about the sources of funding for sustainable energy initiatives. The majority of the Commission agreed that sustainable energy funding is of particular relevance to countries within the Commonwealth of Independent States (CIS) region, as many of these Member States' economies are still developing. In order to address this problem, some representatives proposed that the Commission earmark funds from the World Bank and International Monetary Fund (IMF) in order to ensure that said funds are dedicated to the development of sustainable energy infrastructures for countries within the CIS region. An alternative proposal suggested the Commission harness and refine existing UNECE initiatives, especially initiatives relating to public-private partnerships. This proposal also advanced the creation of a database through which private firms would be able to identify investment areas in Eastern European states. This proposal was supported by several delegates. Some representatives raised the concern that the aforementioned investments might be vulnerable to abuse by corrupt governments. The Commission was also interested in speeches delivered by The World Bank and International Renewable Energy Agency (IRENA) in which the two organizations offered examples of successful investment projects in countries such as Turkey and Morocco – these examples served as a model for the Commission as it continued to

215 devise investment projects. During the Commission's discussions, some representatives proposed decreasing economic
216 barriers to investment. Several representatives suggested the the Commission consider recommending tax reforms
217 that would incentivize investment into sustainable energy. These representatives went on to clarify that their proposals
218 did not involve the imposition of tariffs, but rather was only a recommendation that Member States consider adopting
219 these tax schemes. Several representatives spoke in opposition to this proposal, as taxes related to the use of fossil
220 fuels may damage fragile and developing economies.

221 Noting that knowledge can be as important as monetary investment, several representatives discussed
222 information sharing and education as a vital component of any international transition towards sustainable energy.
223 A few delegates expressed concern that the proposed education programmes might constitute an unjust imposition
224 of Western European influence in Eastern Europe. After its initial deliberations, the Commission recognized the
225 need to identify topic areas that were of particular interest to representatives. Representatives of the Commission
226 identified five areas of special interest, and decided to form five subcommittees in order to efficiently address these
227 areas. The subcommittees formed are listed below:

- 228 • Committee 1: Efficiency and Infrastructure
- 229 • Committee 2: Investment and Finance
- 230 • Committee 3: Trade and Communication
- 231 • Committee 4: National Energy Development Strategies
- 232 • Committee 5: Innovation and Education

233 **Deliberations of the Energy and Infrastructure Subcommittee**

234 A key issue discussed in deliberations prior to the formation of the Efficiency and Infrastructure
235 Committee (EIC) was the need for energy efficiency in order to promote sustainability. A representative proposed a
236 framework that addressed the need to evaluate existing energy systems with the goal of revealing inefficiencies within
237 the production and usage of energy. In addition, the EIC believes it is necessary to identify the most efficient and
238 affordable means of establishing new energy systems in developing Member States. It was suggested that this could
239 be achieved by enabling individual Member States to assess their existing energy systems to reach conclusions about
240 potential solutions.

241 This Subcommittee identified its goals as discussing the streamlining of existing energy systems,
242 implementing plans for periods of transition to more renewable forms of energy, and ensuring efficient infrastructure
243 development for new energy systems.

244 One representative on the Subcommittee emphasized the need to recognize the dependency on fossil
245 fuels for some Member States, and drew attention to the fact that we must ensure efficiency even in the production
246 and consumption processes of nonrenewable resources. Another supported this stance as a means of mitigating
247 dangerous greenhouse gas emissions without trying to enforce a more serious economic measure, such as a carbon
248 tax. Several Member States that are highly dependent on fossil fuels offered support for these recommendations.
249 Other representatives described the ways in which their states had successfully improved upon existing non renewable
250 energy systems. However, one representative pointed out that there are limits to how much efficiency within existing
251 energy systems can be improved.

252 All Member States depend upon power grids for energy supply, yet, as several representatives sug-
253 gested, much of that energy is lost during its transmission and distribution. Thus, another representative addressed
254 the need to revamp power grids for certain Member States. Other representatives encouraged integrated regional
255 power grids to be developed among various Member States. These power grids would recirculate surplus energy,
256 allowing some Member States to draw on the overproduction of others. However, representatives remained wary of
257 systems that they deemed too large and suggested further technological research may be necessary in order to ensure
258 the effectiveness of this solution.

259 Attention was also brought to the existing bodies that serve to increase energy efficiency through
260 a variety of means. One representative reminded the Member States of the Group of Experts on Energy Efficiency
261 (GEEE), which is an already-existing body that could be expanded upon to fulfill some of the Subcommittee's
262 objectives. The Committee agreed that expansions should be created with the consideration as to how the GEEE
263 might have an influence on the evaluation and promotion of energy efficiency.

264 During deliberation, another major topic of interest for the EIC was how cooperation between
265 developing Member States and third party organizations (IGOs and NGOs) might facilitate infrastructure devel-
266 opment within developing countries. While several developed Member States were interested in investing in the
267 energy systems of less developed Member States, many expressed concern as to how funds would be allocated. Some
268 representatives supported repayment plans as well as distribution plans in which funds are dispersed at periodic in-
269 tervals. The discussion eventually shifted to the kinds of suggestions the Committee wished to make on the topic
270 of developing energy infrastructure. Although the EIC considered recommending specific related to reducing fossil
271 fuel consumption, representatives decided that it was best to make more general recommendations for best and
272 broadest effect. The Subcommittee agreed that the Commission should condemn the expansion of coal and other
273 non-sustainable energies such as oil. This suggestion would encourage a shift toward more sustainable energy source,
274 as well as discourage the expansion of fossil fuel energy infrastructures. There was agreement that the National En-
275 ergy Development Strategies Subcommittee should make specific recommendations as to which forms of alternative
276 energies are more favorable for each country. However, this Committee did agree to recommend granting available
277 development and infrastructure subsidies to forms of sustainable energies as well as ensuring that pre-existing energy
278 systems produce energy more efficiently.

279 **Deliberations of the Investment and Finance Subcommittee**

280 The Subcommittee for Investment and Finance (IFC) was established to devise ways to encourage
281 the finance of sustainable energy projects. Members of the Committee discussed the creation of a database that
282 would share relevant information with investors interested in financing sustainable energy. Representatives within
283 the IFC agreed that some of the information this database should supply would include infrastructural costs in
284 investing in certain types of sustainable energy, as well as the availability of each type of energy source within each
285 Member State. The Committee recognized the importance of both public and private funding when considering
286 sources of investment for sustainable energy projects – representatives wished to encourage organizations such as
287 the International Monetary Fund, World Bank, Global Environment Facility, International Finance Corporation,
288 Green Growth Fund, European Bank for Reconstruction and Development, Kreditanstalt Wiederaufbau Bank, and
289 Abu Dhabi Fund to utilize their resources to invest in sustainable energy projects within Europe. Many delegates
290 expressed concern over possible misallocation of investments. In order to ensure investments are used ethically and
291 safely, the Subcommittee discussed the importance of thorough contracts to be sure both investors and Member States
292 are held accountable. Members of the IFC also emphasized the importance of low trade barriers, which facilitate the
293 flow of technologies between states.

294 **Deliberations of the Trade and Communication Subcommittee**

295 In its opening deliberations, members of the Trade and Communication Committee (TCC) readily
296 reached a consensus – trade is essential to the development of free markets that are conducive to renewable energy.
297 However, members of the TCC agreed that developing states with emerging economies may encounter significant
298 challenges when trying to create renewable energy infrastructures.

299 To support the transition from current energy sources towards renewable energy sources, many
300 representatives within the TCC agreed that the first step should be the expansion of renewable energy markets.
301 Almost all delegates supported the expansion of renewable energy sources, but many delegates expressed concern
302 regarding nuclear energy. Members of the Subcommittee agreed that this expansion would encourage a stable
303 transition in which economies to develop sustainable energy infrastructures by encouraging a preference for renewable
304 energies and by helping developing countries gain access to other energy sources in order to satisfy their energy needs.
305 Most members of the Subcommittee agreed that infrastructural growth takes place slowly, and has a relatively long
306 payback period, whereas free renewable energy markets that span across United Nations Economic Commission
307 for Europe (UNECE) Member States could be implemented more quickly. Encouraging Member States to open
308 their renewable energy markets for less developed countries would, in the TCC representatives' view, allow for a more
309 seamless transition period as developing countries seek to establish their own renewable energy infrastructures. Several
310 representatives within the TCC recommended the establishment of a similarly integrated marketplace for vendors and
311 buyers (countries, corporations, NGOs) to trade capital and resources in a centralized database. Members of the
312 Subcommittee agreed that the creation of such a database would foster innovation, competitiveness, and growth
313 in the renewable energy sector across all UNECE Member States. Several representatives pointed out that these

314 initiatives would provide a wider market for existing sustainable energy, and would encourage ongoing development
315 in and innovation of sustainable technology in developed countries.

316 Members of the Subcommittee also proposed the development of a renewable energy free trade zone
317 across across all interested UNECE Member States in which members of free trade zone would unimpeded access to
318 renewable energy. Members argued that this free trade zone would allow the prices of sustainable energy to be more
319 competitive in relation to energy produced by fossil fuels, which would incentivize developing Member Stateswith
320 limited energy sourcesto adopt sustainable energy and develop the infrastructures necessary for the production of
321 sustainable energy.

322 In the spirit of free markets, and for the facilitation of greater participation in the energy market,
323 members of the Subcommittee again emphasized that it is crucial that developing economies are assisted when
324 entering the energy market. Representatives agreed Market diversification, even within the energy sector, remains a
325 long-term goal for the Subcommittee.

326 The Trade and Technology Information Sharing Subcommittee has acknowledged the importance
327 and relevance of renewable energy in the modern market. There is a lack of renewable energy trade opportunities
328 between Member States producing renewable energy and Member States heavily dependent on fossil fuels. Along
329 with a lack of trade, there is a lack of renewable energy development.

330 The Subcommittee of Trade and Technology Information Sharing encourages the promotion of re-
331 newable energy resource and capital market in Member States that would allow open communication, information,
332 and technology as well as energy sharing between Member States. This endorses Member States that previously
333 lacked renewable resources and capita to choose renewable energy for its competitiveness and promotes strong con-
334 sideration for the protection of intellectual property to incentivize the participation by renewable energy providers.
335 To continue, this Subcommittee supports competition for the innovation of more efficient renewable energy while
336 mitigating adversary effects in Member States with established renewable energy industries. The Subcommittee
337 recommends the removal of trade barriers and sanctions of resources and capital related to renewable energy while
338 disapproving any further implementation of barriers and tariffs. The Subcommittee supports the technological and
339 educational information sharing assisting developing Member States and their efforts to produce self-sustainable
340 levels of renewable energy. The body advises sharing experience and information between renewable energy firms in
341 developing Member States and developed Member States to foster a long-term shift toward self-sustainable renewable
342 energy sources in developing Member States of Europe and Central Asia.

343 **Deliberations of the National Energy Development Subcommittee**

344 Sustainable, transparent and efficacious national energy policies form the backbone of renewable
345 energy development. However, The Committee on National Energy Development (NEDC) recognized that the most
346 important policies driving renewable energy improvements are established at the national level. It is therefore
347 extremely important that each state sets relevant, modern policies that guide its energy structure at the national
348 level.Each Member State faces different challenges economically, geographically and politically; representatives within
349 the Commission agreed that energy policies should therefore be different in both form and function across Member
350 States. With these differences in mind, the NEDCdiscussed distinct approaches to renewable development for each
351 Member State. Representatives within NEDCexpressed the belief that it each Member State should be advised by
352 a team of experts on the development and improvement of its energy policies – it is important that each Member
353 State’s advisory board be comprised of experts from both the international community and the community of
354 scholars within each Member State.Delegates within the NEDCreognized that there are several ways in which the
355 Economic and Social Council (ECOSOC) may approach choosing experts for each Member State’sadvisory board;
356 the first and foremost of these involves using existing teams already devoted to advising these Member States.
357 The largest existing organization by far is the International Renewable Energy Agency (IRENA). IRENA is an
358 intergovernmental organization that supports countries as they transition towards sustainable energy, and serves
359 as the principal platform for international cooperation – members of NEDC agreed that IRENA is a center of
360 excellence, as well as a repository of policy, technology, resource and financial knowledge on renewable energy.
361 IRENA includes Committees devoted to nearly all the Member States of the UNECE, as well as of ECOSOC, with
362 the notable exceptions of Canada, Ukraine, and Turkmenistan. The NEDC highly encouraged UNECE Member
363 States to continue to cooperate with IRENA, to follow the strategies recommended by their team of experts and to
364 invite IRENA representatives to all future meetings of the ECE.

An important note about IRENA is that it primarily focuses on renewable energy technology, often on a high level, and therefore may not be a perfect fit for less developed Member States or Member States in a transitional period. Therefore, in the interests of these States, NEDC suggests that ECOSOC consider the creation of a new international organization, similar to IRENA, but with a focus on efficient use of nonrenewable resources. Many Member States rely on nuclear energy, natural gas, and other forms of nonrenewable resources, and it is important to recognize this when pursuing a holistic strategy for sustainable development. Such an organization would be composed of distinct teams of experts for each Member State willing to accept such a team, as well as a few organizational roles to facilitate communication between teams and present to international bodies such as the UNECE.

Members of the Subcommittee acknowledged that IRENA is by no means the only international organization with which UNECE Member States are encouraged to discuss policy approaches. The United Nations Development Program (UNDP), the Food and Agriculture Organization (FAO), the Sustainable Energy Association, and numerous others provide success stories, developing research and scholarly articles, and policy recommendations which could certainly be utilized. Regardless of the organizations with which individual Member States choose to partner, it is extremely important that all Member States follow developing research and innovative sustainability practices and policies. With recent advances in communication technology, data analytics, and the availability of scholarly work, every Member State should take initiative to analyze the data and conclusions reached by IRENA, the UNDP, or whichever organizations they choose to follow. Member States that achieve significant breakthroughs in innovation regarding efficiency and allocation in the energy sector may be incentivised through recognition of their achievements.

Furthermore, NEDC suggests that in all future proceedings of the UNECE, IRENA be invited to present on developments in sustainable energy. With 185 states and 95% of UNECE Member States providing funding and receiving advice from IRENA, members of the Subcommittee agreed that their research and advice will serve an important role in the proceedings of future UNECE meetings.

To provide helpful support and ideas to all Member States, NEDC members suggested the creation of a comprehensive database of successful public implementations of sustainable development projects. There are a few similar databases that already exist, but NEDC members agreed that the existing databases are insufficient for meaningful use by UNECE Member States. The UNDP and the FAO both maintain separate databases of sustainable development projects; however, these databases only contain a cursory description of the project, its location, the project's funding, and a brief overview of the issues which the project addressed. For a database of projects to be successful, members of the Subcommittee agreed that it needs to include detailed information on project resources (monetary, personnel, capital resources, infrastructure, etc), a detailed project timeline, and a final report which overviews the complete implementation of the project from start to finish. NEDC members suggested the funding and implementation of a specialized team to collect data, implement, and market such a database. The NEDC representatives further encouraged each willing Member State to provide a point of contact within their state to work with such a team. Representatives emphasized that this point of contact should be able to provide detailed project information to the specialized team.

Deliberations of the Innovation and Education Subcommittee

Members of the Subcommittee on Innovation and Education (CIE) began their deliberations by recognizing that, besides investments and individualized sustainable energy implementation research, that it is incumbent upon United Nations Economic Commission for Europe (UNECE) Member States to encourage the development of safe and effective sustainable energy infrastructures. The Subcommittee came to the consensus that education and the enrichment of existing energy-related technologies are both vital to such efforts.

Several members of the CIE also posited that, in accordance with Commission's deliberations about energy efficiency, education of the general public on the use of sustainable energy is central to facilitating a transition towards sustainable energy. The Subcommittee thus agreed that advising local governments to launch sustainable energy awareness campaigns and to collaborate with education-related organization within the United Nations, such as United Nations Educational, Scientific and Cultural Organization (UNESCO) to implement these educational campaigns. Several representatives within the Subcommittee stressed that education inevitably leads to increased innovation and improvement of existing technology – many representatives articulated their strong agreement with this idea. A few representatives claimed that, in order to facilitate innovation of any kind, Member States must maintain a fundamental base education level. Some representatives disagreed, arguing that education is not necessary

417 in order to harness new technologies. A few delegates discussed the ways in which partnerships between educational
418 institutions across all UNECE Member States may help foster sustainable energy related education. Members agreed
419 that there are a variety of ways to do this, but one method might include an information exchange program between
420 both educational institutions and research groups, resulting in the more widespread dissemination ideas than would
421 otherwise be possible.

422 Some representatives proceeded to highlight the importance of encouraging states to finance educa-
423 tion for individuals serving in the armed forces. Some representatives expanded upon this idea by recommending
424 across-the-board government subsidies for education. Further elaboration was requested on that statement, to which
425 the representatives explained that there should be specific programs: scholarship programs and internship programs
426 for students from developing Member States to go to developed Member States and ultimately bring their knowledge
427 back to their home states. Additionally, some members of the Subcommittee argued that there should be a special
428 provision in these scholarships that requires students work in their home country. After these discussions, some
429 representatives raised the issue of funding. In response, several representatives pointed out that the Subcommittee
430 can encourage that the Commission to recommend sources for the funding of private institutions. All members of
431 the Committee agreed that it is in every UNECE Member States interest to have an educated populace. Repre-
432 sentatives within the Committee inquired as to where exactly individuals seeking the aforementioned educational
433 opportunities would acquire said opportunitites. A representative noted that Saudi Arabia is an example where this
434 sort of scholarship thrives, but that it is an oil-rich nation, questioning whether other nations be able to afford this
435 sort of thing.

436 The Subcommittee discussed the possibility of writing a draft resolution. With widespread support
437 from essentially all parties, the Subcommittee agreed that some resolution on the topic of education should be drafted.
438 One representative recommended asking the Group of Experts on Energy Efficiency (GEEE) to investigate the
439 possibility of creating various internships and scholarships that would encourage citizens of UNECE Member States
440 to acquire sustainable energy focused educations. The same representative recommended implementing sustainable
441 energy awareness campaigns across UNECE Member States that would educate populations as to why exactly states
442 must begin to abandon their fossil fuel industries. Members of the Subcommittee overwhelming responded that
443 awareness campaigns should be implemented.

444 **Adoption of the Report**

445 At its meeting on 22 November 2016, the draft report of the Commission was made available for
446 consideration. The Commission considered the report, with three resolutions, and with two amendments, adopted the
447 draft report by consensus.