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Jenny Sing-hang Ngai

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ENERGY AS A HUMAN RIGHT IN ARMED CONFLICT: A QUESTION OF UNIVERSAL NEED, SURVIVAL, AND HUMAN DIGNITY

*Jenny Sin-hang Ngai**

It was never the people who complained of the universality of human rights, nor did the people consider human rights as a Western or Northern imposition. It was often their leaders who did so. –Kofi Annan¹

INTRODUCTION

This Article sets out to examine the individual's entitlement to access modern energy services in one of the most complex and pervasive long-lasting problems facing human existence today: armed conflict. In exploring the role of energy in realizing basic human needs, this Article will show how energy is at the center of human survival and development. A substantial part of the discussion will be dedicated to the merits of recognizing access to energy as a human right and its implications on the international obligations of States. This analysis will examine the existing norms concerning energy under international humanitarian law and human rights law, as well as emerging international practice in support of a case for energy rights. It will then attempt to identify the content of the right and the legal obligations it entails. Finally, concluding remarks will be delivered on the status of the right to energy as a universal human right, its applicability in armed conflict, future challenges, and recommendations for the way forward.

I. THE WORLD'S ENERGY CRISES – A REALITY CHECK

Energy as a Privileged Basic Need

Access to modern energy services, although taken for granted by many, still remains an unimaginable luxury to a substantial portion of the world's population.² One full decade into the twenty-first century, two

* L.L.B., University of Hong Kong (2009); P.C.L.L., University of Hong Kong (2010); M.A.S./L.L.M., Geneva Academy of International Humanitarian Law and Human Rights (2011). I would like to thank Professor Eibe Riedel and Gilles Giacca for their inspirations and guidance.

1. DOUGLAS A. PHILLIPS, GLOBAL CONNECTIONS: HUMAN RIGHTS 108 (Charles F. Gritzner ed., 2009) (quoting Kofi Annan, U.N. Secretary-General).

2. For the purposes of this Article, access to modern energy services includes household or community access to electricity and clean fuels, which can be used to, inter alia, illuminate homes, workplaces, and schools, generate heat for cooking, and power for water and sanitation systems.

billion people—one-third of the world's entire population—are still struggling to survive with no access to electricity.³ While 80 percent of these cases occur in rural areas and almost 99 percent of them in developing countries,⁴ problems relating to energy also exist in the so-called developed countries, where marginalized and underprivileged groups suffer from frequent disconnections from energy services due to non-payment of unaffordable bills.⁵ It is widely accepted by the international community that the lack of access to energy is a major cause of numerous social problems facing the world today, including poverty⁶—a

3. It is further shown that an estimated three billion people across the globe without access to sustainable and affordable modern energy. See *Ending Energy Poverty*, WORLD ECON. FORUM (Jan. 27, 2012), <http://www.weforum.org/sessions/summary/ending-energy-poverty>.

4. U.N. DEV. PROGRAMME [UNDP] ET AL., *ENERGY FOR SUSTAINABLE DEVELOPMENT: A POLICY ACTION AGENDA*, at 44, U.N. Sales No. E.02.III.B.7 (Thomas B. Johansson & Jose Goldemberg eds., 2002). For example, the average electrification rate in African is around 26 percent (compared to 60 percent worldwide), meaning almost 70 percent of the African population have no access to electricity. ORG. FOR ECON. CO-OPERATION & DEV. [OECD], *THE AU/NEPAD AFRICAN ACTION PLAN 2010-2015: ADVANCING REGIONAL AND CONTINENTAL INTEGRATION IN AFRICA* 1, 5 (2009), available at <http://www.oecd.org/dataoecd/27/32/44326734.pdf>; see Grp. of Experts on Global Energy Efficiency 21, *Recent Developments in the Global Energy Efficiency 21 Project*, Comm. on Sustainable Energy, Econ. Comm'n for Eur., ECE/ENERGY/WP.4/GE.2/2010/2 (Feb. 5, 2010), available at http://www.unece.org/fileadmin/DAM/energy/se/pdfs/eneff/gee21/gee21_ahge1/ECE.ENERGY.WP.4.GE.2.2010.3_e.pdf; see also *Energy at the Centre of Africa's Future Growth*, BOTSWANA GAZETTE (Jan. 25, 2010), available at http://www.gazettebw.com/index.php?view=article&catid=13%3Abusiness&id=5208%3Aenergy-at-the-centre-of-africas-future-growth-&format=pdf&option=com_content; Conference of Energy Ministers of Afr. [CEMA], *Energy Infrastructure and Services in the Context of Climatic Challenges & Promotion of Investment for Infrastructure Development in Africa* (Nov. 2010), http://www.uneca.org/eca_programmes/development_policy_management/events/EnergyWeek2010/AAEW%20Joint%20Ministerial-ECA%20Event%202010-CONCEPT%20Note-draft4-9-2010.pdf. For the situation in the Asia and the Pacific Region, see U.N. Econ. & Soc. Comm. for Asia & the Pacific [UNESCAP], *Energy Security and Sustainable Development in Asia and the Pacific* 12 (Apr. 2008), http://www.unescap.org/esd/energy/publications/theme_study/themstudy.pdf.

5. See Coalition of Belgian Civil Society for Econ., Soc., & Cultural Rights, *Joint Parallel Rep. Compliance of Belgium with its Obligations under the ICESCR* 5, 18–22 (2005).

6. See generally Rep. of the U.N. World Comm'n on Env't & Dev., *Our Common Future*, U.N. Doc. A/42/427 (1987) [hereinafter Brundtland Report]; Stephen R. Tully, *The Contribution of Human Rights to Universal Energy Access*, 4 N.W. U.J. INT'L HUM. RTS. 518 (2006); Adrian Bradbrook & Judith G. Gardam, *Placing Access to Energy Services within a Human Rights Framework*, 28 HUM. RTS. Q. 389, 389–90 (2006); Steven Humphreys, Keynote Speech at the U.N. Social Forum 2010: Climate Change and Hu-

“global phenomenon experienced in varying degrees by all States.”⁷ “Energy poverty,”⁸ or the “absence of sufficient choice in accessing adequate, affordable, reliable, high quality, safe, and environmentally benign energy services to support economic and human development,”⁹ has serious consequences. Not only does it impede development, it also undermines the enjoyment of a wide range of human rights, particularly those relating to the improvement of living standards.¹⁰ The United Nations Committee on Economic, Social and Cultural Rights (“CESCR”), in defining poverty, has acknowledged the interrelation between access to necessary energy resources, poverty alleviation, and human rights.¹¹ The impact of this interaction is particularly drastic on the lives and well-being of the vulnerable groups of society, most notably women and chil-

man Rights: Crisis and Utopia (Oct. 4–6, 2010), *available at* <http://www2.ohchr.org/english/issues/poverty/docs/sforum/presentations2010/Humphreys.doc>.

7. U.N. Comm. on Econ., Soc. & Cult. Rts. [CESCR], Poverty and the International Covenant on Economic, Social and Cultural Rights’ Statement to the Third United Nations Conference on the Least Developed Countries, ¶ 5, U.N. Doc. E/C.12/2001/10 (May 10, 2001) [hereinafter CESCR Statement on Poverty]; Bradbrook & Gardam, *supra* note 6, at 392; Stephen R. Tully, *The Human Right to Access Electricity*, 3 J. GREEN BLDG. 2, 143 (2008); *see also* World Summit on Sustainable Dev. [WSSD], Aug. 26–Sept. 4, 2002, *Plan of Implementation*, ¶ 8, U.N. Doc. A/CONF.199/20/Corr.1 (Sept. 23, 2002), *available at* http://www.un.org/jsummit/html/documents/summit_docs/2309_planfinal.htm [hereinafter WSSD, *Plan of Implementation*]; UNESCAP, *Bali Declaration on Asia-Pacific Perspectives on Energy and Sustainable Development* 13, U.N. Doc. ST/ESCAP/2130 (2001), *available at* <http://www.unescap.org/esd/publications/energy/HLR/book.pdf> (which states that “[a]ccessibility to commercial energy supply is essential for any programme of alleviating poverty through the provision of basic minimum human needs.”).

8. *See* ESCOR, Econ. Comm. for Europe, Comm. on Sustainable Energy, Rep. of the Group of Experts on Global Energy Efficiency 21, ¶ 16, U.N. Doc. ECE/ENERGY/WP.4/GE.2/2010/2 (July 22, 2010) [hereinafter GEE21 Report]; *see also* Rep. of the Ad Hoc Open-Ended Intergovernmental Grp. of Experts on Energy & Sustainable Dev., Comm. on Sustainable Dev., 8th Sess., Apr. 24–May 5, 2000, ¶¶ 11, 17, U.N. Doc. E/CN.17/2001/15 (Mar. 27, 2000).

9. Amulya K.N. Reddy, *Energy and Social Issues*, in UNDP, WORLD ENERGY ASSESSMENT: ENERGY & THE CHALLENGE OF SUSTAINABILITY 44 (2000) [hereinafter WEA 2000], *available at* www.undp.org/energy/activities/wea/drafts-frame.html.

10. *See, e.g.*, Rep. of the U.N. Conference on Env’t & Dev., Rio de Janeiro, Braz., June 3–14, 1992, ¶ 7.46, U.N. Doc. A/CON.151/26 (Vol. I–III), Annex II (Aug. 12, 1992) [hereinafter Agenda 21].

11. CESCR Statement on Poverty, *supra* note 7, ¶ 8, where poverty is defined as “a human condition characterized by sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights.”

dren in poor, rural areas.¹² Women living in areas without adequate access to electricity are more likely to develop health problems such as respiratory diseases caused by indoor air pollution from burning firewood for cooking.¹³ Children brought up in these deprived areas tend to have their educations seriously jeopardized, as they often need to spend long hours out of school collecting firewood for the family and, even in their scarce free time, are unable to study effectively due to inadequate lighting after dark.¹⁴

Energy as the Key to Survival in Armed Conflict

Deprivation of energy access, which generates countless problems in peacetime, can be doubly devastating in the most dangerous of situations for human existence—armed conflict.¹⁵ Problems with energy access are prone to occur more often and on a much greater scale in times of armed conflict. Moreover, the lack of energy security during armed conflict can significantly undermine the chances of survival of the civilians who, in their vulnerable position, are most in need of protection. Electricity-producing infrastructures are considered to be of generally recognized military importance,¹⁶ and are targeted for destruction on grounds of “military necessity.”¹⁷ Disrupting electricity is often considered “time-crucial” and “vital” to “ensure mission accomplishment,”¹⁸ a form of

12. See, e.g., HEIKE MAINHARDT-GIBBS & ELIZABETH BAST, OIL CHANGE INT'L, WORLD BANK GROUP ENERGY FINANCING: ENERGY FOR THE POOR? (Oct. 2010), available at <http://priceofoil.org/educate/resources/energy-for-the-poor>.

13. Tully, *Universal Energy Access*, *supra* note 6, at 538–39.

14. Bradbrook & Gardam, *supra* note 6, at 395.

15. See MARCO SASSÒLI & ANTOINE A. BOUVIER, HOW DOES LAW PROTECT IN WAR? 209–15 (Int'l Comm. of the Red Cross, 2d ed. 2006).

16. See, for example, the proposed annex to Art. 7(2) of the 1956 New Delhi Draft Rules in INT'L COMM. OF THE RED CROSS, 2 CUSTOMARY INTERNATIONAL HUMANITARIAN LAW 216–17, ¶ 564 (Jean-Marie Henckaerts & Louise Doswald-Beck eds., 2005) [hereinafter Henckaerts & Doswald-Beck], available at <http://www.icrc.org/eng/assets/files/other/customary-international-humanitarian-law-ii-icrc-eng.pdf>.

17. See Barton Gellman, *Allied Air War Struck Broadly in Iraq; Officials Acknowledge Strategy Went Beyond Purely Military Targets*, WASH. POST, June 23, 1991, at A1 (quoting a U.S. Air Force planner saying “We’re not going to tolerate Saddam Hussein or his regime. Fix that and we’ll fix your electricity.”); see also CTR. FOR ECON. & SOC. RTS., SPECIAL REPORT: WATER UNDER SIEGE IN IRAQ 5 (Apr. 2003) [hereinafter WATER UNDER SIEGE IN IRAQ], available at <http://www.cesr.org/downloads/waterundersiege.pdf>.

18. U.S. DEP'T OF DEF., CONDUCT OF THE PERSIAN GULF WAR: FINAL REPORT TO CONGRESS 148, 232 (1992).

retaliation,¹⁹ or can be otherwise classified as “collateral damage.”²⁰ Regardless of the motives, the consequent breakdown of energy services threatens the survival of most vulnerable group in any armed conflict, the civilian population. For example, it is reported that during the 1991 Gulf War, “the vast majority of deaths were caused not by the direct impact of bombs but by the destruction of the electric power grid and the ensuing collapse of the public health, water and sanitation systems, leading to outbreaks of dysentery, cholera, and other water-borne diseases.”²¹ Similarly, extensive blockades or policies restricting supplies of electricity and fuel are not uncommon in occupied territories.²² These have led to severe, long-term impacts on the livelihood and well-being of the civilian population, as seen in the case of the Occupied Palestinian Territory, whose supply of electricity is “almost totally dependent on Israel.”²³ The prolonged fuel shortage and the inability of the local power plant to meet the demand of the general population have seriously disrupted the public health systems, damaged medical equipment, and impaired the water and sanitation systems, thus resulting in water impurities and further public health risks.²⁴ In fact, these issues provided the background of to the *Fuel and Electricity Case* brought before the Israeli Supreme Court.²⁵ In upholding the decision of Israel to reduce or limit the supply of fuel and electricity in the Gaza Strip, the Court relied heavily on the military ne-

19. See, e.g., Bassem Mroue, *Hezbollah Warns of Retaliation for Any Israeli Hit*, NASHUA TEL. (Feb. 16, 2010), <http://www.nashuatelegraph.com/news/worldnation/626395-227/hezbollah-warns-of-retaliation-for-any-israeli.htm>.

20. See, e.g., Alexandra Boivin, *The Legal Regime Applicable to Targeting Military Objectives in the Context of Contemporary Warfar*, in RESEARCH PAPER SERIES 24 (Univ. Ctr. for Int'l Humanitarian L. No. 2, 2006), available at http://www.adh-geneve.ch/docs/publications/collection-research-projects/CTR_objectif_militaire.pdf.

21. WATER UNDER SIEGE IN IRAQ, *supra* note 17, at 4. For reports on similar situations during the Israel attacks on Hezbollah in Lebanon in 2006, see also Peter Symonds, *Amnesty International Details Israeli War Crimes in Lebanon*, WORLD SOCIALIST WEB SITE (Aug. 25, 2006), <http://www.wsws.org/articles/2006/aug2006/amne-a25.shtml>; Steve Coll, *Afghanistan's Fate: Healing or Disintegration?*, WASH. POST, May 3, 1992, cited in Human Rights Watch, *Blood-Stained Hands: Past Atrocities in Kabul and Afghanistan's Legacy of Impunity* (2005), available at <http://www.unhcr.org/refworld/docid/45c2c89f2.html>.

22. See HCJ 9132/07 Jaber Ahmad et al. v. Minister of Defense [2008] (Isr.) [hereinafter *Fuel and Electricity Case*].

23. *Id.* ¶ 12.

24. Human Rights Council, Rep. on Human Rights in Palestine and Other Occupied Arab Territories: Rep. of the United Nations Fact Finding Mission on the Gaza Conflict, ¶¶ 1216–20, 1242, 1248, U.N. Doc. A/HRC/12/48 (Sept. 25, 2009) [hereinafter U.N. Palestine Report].

25. *Fuel and Electricity Case*, *supra* note 22.

cessity of 'the war on terror' against Hamas. It also considered that the amount of fuel and electricity Israel intended to supply would be "sufficient to meet the [future] vital humanitarian needs"²⁶ of the population on the occupied territory. Without delving into the reasoning of the Court, this helps illustrate how inadequate access to energy services particularly affects people in armed conflict and military occupation, and traditional approaches to the existing legal framework may not serve to protect the right to energy of the most vulnerable. In humanitarian crises today, what one sees and hears is only the tip of the iceberg. One ought not forget that countless unnamed individuals have suffered or died in war-torn territories from the collapse of essential public services caused by the lack of energy access.²⁷ Hence, the question of energy access becomes one of survival in times of armed conflict, where the denial of energy needs almost certainly leads to the denial of human survival needs. A real need has emerged for the individual's legal entitlement to energy access in armed conflict to be the formally recognized.

II. APPLICABLE LAWS IN ARMED CONFLICT: INTERNATIONAL HUMANITARIAN LAW VS. HUMAN RIGHTS LAW

Mutual Complementarity

Before making a case for the right in detail, it is helpful to examine the relations between international human rights law and international humanitarian law. Although "designed to operate primarily in normal peacetime conditions" with the state-individual relationship,²⁸ human rights apply "always, everywhere, and to everyone."²⁹ States are bound by their international obligations to protect and preserve human rights and fundamental freedoms of the individual "at all times, in war and peace alike."³⁰ International humanitarian law, capable of regulating

26. *Id.* ¶ 22.

27. One can see this in the gender dimension in the case of Afghan women being barred from Kabul hospitals under Taliban policy, where the only establishment women could access could barely operate due to the lack of running water and inadequate electricity. See SASSÒLI & BOUVIER, *supra* note 15, at 2297–98; S.C. Res. 1193, ¶ 14, U.N. Doc. S/RES/1193 (Aug. 28, 1998).

28. Christopher Greenwood, *Scope of Application of Humanitarian Law*, in THE HANDBOOK OF INTERNATIONAL HUMANITARIAN LAW 45, 74 (Dieter Fleck ed., Oxford Univ. Press 2d ed. 2008) [hereinafter IHL HANDBOOK].

29. U.N. Secretary-General, *Respect for Human Rights in Armed Conflicts*, ¶ 25, U.N. Doc. A/8052 (Sept. 18, 1970).

30. Rep. of the Int'l Comm. of Inquiry on Darfur to the U.N. Secretary-General pursuant to S.C. Res. 1564, ¶ 144 (Jan. 25, 2005) [hereinafter Darfur Report]; see also Int'l

power-relationships between all states,³¹ between the state and the individual and among individuals, applies only to situations of armed conflict and occupation³²—to the exclusion of “internal disturbances and tensions.”³³ This makes room for concurrent application of different norms to the same situation, such as in a given armed conflict.³⁴ Applicable norms from the two regimes are “complementary, not mutually exclusive,”³⁵ but rather “mutually reinforcing.”³⁶ This approach, consistent with the Vienna Convention on the Law of Treaties,³⁷ also entails that the relevant rules are to be interpreted in light of one another.³⁸ This

Conf. on Human Rights, Teheran, Iran, Apr. 22–May 13, 1968, *Final Act of the Int’l Conf. on Human Rights*, Res. XXIII, U.N. Doc. A/Conf.32/41 (May 12, 1968).

31. See *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 I.C.J. 226, ¶ 79 (July 8) [hereinafter *Nuclear Weapons Opinion*] (citing *Corfu Channel (U.K. v. Alb.)*, 1949 I.C.J. 4 (Apr. 9)) (where the ICJ held that the rules of humanitarian law applicable in armed conflict constitute “intransgressible principles of international customary law,” fundamental to the respect of the human person and “elementary considerations of humanity,” which must be observed by all States whether or not they have ratified the conventions that contain them.).

32. See *Geneva Convention Relative to the Protection of Civilian Person in Time of War*, arts. 2–3, Aug. 12, 1949, 6 U.S.T. 3316, 75 U.N.T.S. 287 [hereinafter *GC IV*]; *Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts*, Protocol I, art. 1(4), June 8, 1977 [hereinafter *AP I*]; *Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts*, Protocol II, art. 1, June 8, 1977 [hereinafter *AP II*].

33. *AP II*, *supra* note 32, art. 1(2). For definitions, see SASSÒLI & BOUVIER, *supra* note 15, at 110 n.32. See also *Rome Statute of the International Criminal Court* art. 8(2)(f), July 17, 1998, 2187 U.N.T.S. 90 [hereinafter *ICC Statute*].

34. René Provost, *INTERNATIONAL HUMAN RIGHTS LAW AND HUMANITARIAN LAW* 274 (2002).

35. U.N. Off. of the High Comm’n for Human Rights [U.N. OHCHR], *Human Rights Comm., General Comment No. 31, The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, ¶ 11, U.N. Doc. CCPR/C/21/Rev.1/Add/13 (2004) [hereinafter *General Comment No. 31*]; SASSÒLI & BOUVIER, *supra* note 15, at 341–54; Article 75 of the *Additional Protocol* provides that “[n]o provision of this Article may be construed as limiting or infringing any other more favorable provision granting greater protection, under any applicable rules of international law.” *AP I*, *supra* note 32, art. 75(8).

36. *Darfur Report*, *supra* note 30, ¶ 144. The Commission went on in the same paragraph to consider that *Additional Protocol I* to the *Geneva Conventions* “evokes the protection of human rights law for the human person,” which “in itself applies the duty of the state to protect also to situations of armed conflict.” *Id.*

37. *Vienna Convention on the Law of Treaties*, May 23, 1969, 115 U.N.T.S. 331, 8 I.L.M. 679. Article 31(3)(c) provides that as a general rule of interpretation, “any relevant rules of international law applicable in the relations between the parties” shall be taken into account. *Id.*

38. *General Comment No. 31*, *supra* note 35, ¶ 11.

has been affirmed in a wide range of authoritative texts and international jurisprudence, including the cases before the Inter-American Court of Human Rights:

[A]ll persons, during internal or international armed conflict, are protected by the provisions of international human rights law . . . and by the specific provisions of international humanitarian law. . . . [T]he specificity of the provisions of international humanitarian law that protect individuals subject to a situation of armed conflict do not prevent the convergence and application of the provisions of international human rights law . . . both parties had the obligation to respect a serious of provisions of international law, including those stipulated in international human rights law or in international humanitarian law, or in both.³⁹

In its Advisory Opinion concerning the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, the International Court of Justice (“ICJ”) found that:

As regards the relationship between international humanitarian law and human rights law, there are thus three possible situations: some rights may be exclusively matters of international humanitarian law; others may be exclusively matters of human rights law; yet *others may be matters of both these branches of international law*.⁴⁰

In short, human rights norms are generally applicable in armed conflict, whereas humanitarian law may also be applied by human rights organs and treaty bodies.⁴¹ Insofar as the case of energy is concerned, it arguably falls within the third situation acknowledged by the ICJ to which both branches of law are relevant, as energy access is both a human rights issue at all times and an issue of military objective and of sur-

39. *Serrano-Cruz Sisters v. El Salvador*, Preliminary Objections, Inter-Am. Ct. H.R. ¶¶ 112, 117 (Nov. 23, 2004); *see also* Comm. on the Elimination of Racial Discrimination, *Concluding Observations of the Committee on the Elimination of Racial Discrimination on the United States of America*, ¶ 24, U.N. Doc. CERD/C.USA/CO/6 (2008); *Loizidou v. Turkey*, 310 Eur. Ct. H.R. (ser. A) at 43 (1995); *Bankovic et al. v. Belgium*, App. No. 52207/99, 333 Eur. Ct. H.R. 57 (2001); *Bámaca-Velásquez v. Guatemala*, Inter-Am. Ct. H.R. ¶ 209 (Nov. 25, 2000); *Las Palmeras v. Colombia*, Preliminary Objections, Inter-Am. Ct. H.R. ¶ 34 (Feb. 4, 2000); *Commission Nationale des Droits de L'Homme et des Libertés v. Chad*, ¶ 21, Comm. No. 74/62, Afr. Comm. Hum. & Peoples' Rights (1995); *Democratic Republic of Congo v. Burundi, Rwanda and Uganda*, ¶ 65, Comm. No. 227/99, Afr. Comm. Hum. & Peoples' Rights (2003).

40. *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, 2004 I.C.J. ¶ 106 (July 6) [hereinafter *Wall Opinion*] (emphasis added).

41. Rüdiger Wolfrum & Dieter Fleck, *Enforcement of International Humanitarian Law*, in IHL HANDBOOK, *supra* note 28, at 676, 715.

vival of the civilians in armed conflict. The question now turns to the interaction between them and the implication for application and enforcement of energy as a human right in armed conflict.

International Humanitarian Law as 'Lex Specialis'?

The legal maxim *lex specialis derogat legi generali*, a generally accepted technique of interpretation and conflict resolution in international law, entails the notion that “whenever two or more norms deal with the same subject matter, priority should be given to the norm that is more specific.”⁴² In other words, “law specially tailored to a particular context takes precedence over generally applicable law.”⁴³ International humanitarian law, historically “conceived of specifically to address the kinds of situations which arise in warfare and the dynamics which underpins them,”⁴⁴ is often referred to as *lex specialis* when placed vis-à-vis concurrently applicable human rights standards, which are considered *lex generalis*. Notwithstanding this characterization, the applicability of human rights standards alongside humanitarian law in cases of military occupation has been well-recognized.⁴⁵ The ICJ, having affirmed the extra-territorial applicability of human rights law to Israel regarding the occupied Palestinian territory in its *Wall Opinion*,⁴⁶ went on to refer to the two applicable branches of law as “namely human rights law and, as *lex specialis*, international humanitarian law.”⁴⁷ It is not entirely clear how the two bodies of norms interrelate in times of armed conflict due to some conceptual ambiguities and diverse approaches to the maxim.⁴⁸ After an analysis of the International Covenant on Civil and Political

42. *Conclusions of the work of the Study Group on the Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law*, [2006] 2 Y.B. Int'l L. Comm'n 2, ¶ 5, U.N. Doc. A/61/10.

43. Connor McCarthy, *Legal Conclusion or Interpretative Process? Lex Specialis and the Applicability of International Human Rights Standards*, in INTERNATIONAL HUMANITARIAN LAW AND HUMAN RIGHTS LAW: TOWARDS A NEW MERGER IN INTERNATIONAL LAW 101, 101 (2008).

44. *Id.* at 101.

45. See, e.g., *Armed Activities on the Territory of the Congo (Dem. Rep. Congo v. Uganda)*, Judgment, 2005 I.C.J. 168, ¶¶ 178–79 (Dec. 19); U.N. OHCHR, Human Rights Comm., General Comment No. 6, The Right to Life (art. 6), ¶ 2, U.N. Doc. HRI/GEN/1/Rev.1 (1982); CESCR, Concluding Observations of the Comm. on Econ., Soc., & Cultural Rights: Isr., ¶ 31, 13th Sess., May 23, 2003, U.N. Doc. E/C.12/1/Add.90 (2003).

46. *Wall Opinion*, *supra* note 40, ¶ 106; General Comment No. 31, *supra* note 35, ¶ 10.

47. *Wall Opinion*, *supra* note 40, ¶¶ 106, 112, 130, 137 (on the ICJ's finding of human rights violations on part of Israel); see also *Darfur Report*, *supra* note 30, ¶ 143.

48. McCarthy, *supra* note 43, at 101–09.

Rights (“ICCPR”)⁴⁹ and the International Covenant on Economic, Social and Cultural Rights (“ICESCR”),⁵⁰ together with their *travaux préparatoires* and relevant state practice, some conclude that in situations of armed conflict and military occupation, international humanitarian law is to be applied *lex specialis to the exclusion of* human rights norms:

[T]he best reading of the interrelationship between the [ICCPR] and international humanitarian law is the more traditional view that international humanitarian law should be applied as the *lex specialis* in determining what a state’s obligations are during armed conflict or military occupation.⁵¹

However, such a categorical and conclusory approach is “fundamentally problematic.”⁵² Given the “multiplicity of interwoven treaty standards,” customary norms contained in international humanitarian law,⁵³ and the impossibility to maintain any sharp distinction between human rights law and humanitarian law,⁵⁴ any straightforward assignment of the latter as *lex specialis* would be incomplete and inadequate for the purpose of determining the applicable norms and their interrelation in any given case.⁵⁵ Indeed, this approach has been criticized for its “effect of displacement,”⁵⁶ “superficial simplicity,”⁵⁷ and its erroneous presumption that “specificity is effectiveness.”⁵⁸ Moreover, it would only be at odds with a growing body of authoritative legal determinations which envisage some form of concurrent role for *generalis* and *specialis* norms, especially in international humanitarian and human rights law.⁵⁹ In its Advisory Opinion concerning the *Legality of the Threat or Use of Nuclear Weapons*, the ICJ held that the test for a violation of the right to life, namely an arbitrary deprivation of life⁶⁰ “falls to be determined by the

49. International Covenant on Civil and Political Rights, Dec. 19, 1966, 999 U.N.T.S. 171 (1966) [hereinafter ICCPR].

50. International Covenant on Economic, Social and Cultural Rights, Dec. 16, 1966, 993 U.N.T.S. 3 (1976) [hereinafter ICESCR].

51. Michael Dennis, *Application of Human Rights Treaties Extraterritorially in Times of Armed Conflict and Military Occupation*, 99 AM. J. INT’L L. 119, 139 (2005); see also McCarthy, *supra* note 43, at 107, 141 (where the same conclusions were made, *mutatis mutandis*, in respect of the ICESCR).

52. McCarthy, *supra* note 43, at 110.

53. *Id.* at 109.

54. *Id.* at 110.

55. *Id.* at 103.

56. *Id.* at 106, 118.

57. *Id.* at 117.

58. *Id.* at 116.

59. *Id.* at 108.

60. ICCPR, *supra* note 49, art. 6(1).

applicable *lex specialis*, namely, the law applicable in armed conflict which is designed to regulate the conduct of hostilities.”⁶¹ It is argued that one main effect of the *lex specialis* principle is that “specific rules of human rights law are applied by reference to the standards in humanitarian law” in areas where they are both applicable.⁶² Recently, the UN Committee against Torture, in rejecting the United States’ categorical *lex specialis* arguments in relation to its detention operations in Guantanamo, Afghanistan, and Iraq, reaffirmed this approach:

[T]he Convention [Against Torture] applies at all times, whether in peace, war or armed conflict, in any territory under its jurisdiction and that the applicant of the Convention’s provisions are without prejudice to the provisions of any other international instrument.⁶³

Therefore, different legal norms are better viewed as “existing along a spectrum of legal relevancy to the factual circumstances at issue,”⁶⁴ for *lex specialis* applies not to the general relationship between the two branches of law, but relates to “specific rules in specific circumstances.”⁶⁵ Fundamentally, they cannot address every specific problem in a given situation adequately without the complementary application of other, perhaps more general, rules that are concurrently applicable. Hence, the right question is not whether or a norm is *lex specialis per se*, but rather, which norms are most relevant to a factual context at issue. In this case, it is the lack of access to modern energy services and its consequences in armed conflict.

III. ACCESS TO ENERGY IN ARMED CONFLICT UNDER INTERNATIONAL HUMANITARIAN LAW

International Humanitarian Law: Obligations vs. Rights

Given the interplay of the two fields of law, answering whether the individual has a legal entitlement, or right, to energy in armed conflict, requires an examination of the relevant norms under both international humanitarian and human rights laws. Despite their distinct historical ori-

61. Nuclear Weapons Opinion, *supra* note 31, ¶ 25.

62. Greenwood, *supra* note 28, at 45, 74. Article 75 of AP I expressly provides for complementarity as to the human right to due process or “fundamental guarantees.” AP I, *supra* note 32, art. 75.

63. Concl. & Rec. of the Comm. Against Torture, Comm. Against Torture, 36st Sess., May 1–19, 2006, ¶ 14, U.N. Doc. CAT/C/USA/CO/2 (2006); *see also* McCarthy, *supra* note 43, at 108.

64. McCarthy, *supra* note 43, at 110.

65. Greenwood, *supra* note 28, at 75 (emphasis added).

gins, differences in codification, and enforcement mechanisms, both branches of law serve the same purpose: to protect the individual.⁶⁶ It is argued that a number of rules under international humanitarian law, although not formulated in the rights language, are to a large extent analogous to the human rights obligations to respect, protect, and fulfill basic human needs. Access to energy services gives rise to both positive and negative obligations:⁶⁷ to *refrain* from certain methods of combat that can result in disruption or deprivation of access, and to provide access.⁶⁸

Obligation to Protect Objects Indispensable to the Survival of the Civilian Population

In both international and non-international armed conflict, it is generally prohibited to “attack, destroy, remove or render useless objects indispensable to the survival of the civilian population, *such as* foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works.”⁶⁹ This prohibition implicates energy rights, as it has been shown that energy access is crucial for the survival of the civilian population.⁷⁰ Undoubtedly, energy is required for the effective operation of, *inter alia*, the “production of foodstuffs,” “drinking water installations and supplies,”⁷¹ “irrigation works,” and many other civilian infrastructures. Therefore installations for electric power, being objects needed to facilitate energy access to the civilian population, *prima facie* fall within the definition of “objects indispensable to the survival of the civilian population.”⁷²

66. See A.H. Robertson, *Humanitarian law and Human Rights*, in *STUDIES AND ESSAYS ON INTERNATIONAL HUMANITARIAN LAW AND RED CROSS PRINCIPLES: IN HONOUR OF JEAN PICTET*, 793, 793–802 (1984).

67. Although many provisions are formulated in terms of “prohibition,” the titles of the relevant articles refer to “protection,” which arguably favors the approach of reading into the prohibitory provisions the corresponding positive obligations to respect and protect the objects at stake.

68. See Henckaerts & Doswald-Beck, *supra* note 16, at 149–62, 1148–56.

69. AP I, *supra* note 32, art. 54(2) (emphasis added); AP II, *supra* note 32, art. 14 (emphasis added). Note that in international armed conflicts, only destruction, removal, or rendering useless of these objects for the specific “purpose of depriving the civilian population” of them “for their sustenance value” is prohibited, but not if it is the result of incidental damage. See Stefan Oeter, *Methods and Means of Combat*, in *IHL HANDBOOK*, *supra* note 28, at 129, 218–19. Furthermore, in international armed conflicts, it is prohibited to make these objects “the object of reprisals.” AP I, *supra* note 32, art. 54(4).

70. See *supra* Part I; see also *WATER UNDER SIEGE IN IRAQ*, *supra* note 17.

71. See Oeter, *supra* note 69, at 219 (where the 1991 Operation Desert Storm in Iraq was referred to as an example of what resulted when the power supply was disturbed).

72. Henckaerts & Doswald-Beck, *supra* note 16, at 1156, ¶ 267.

Moreover, these provisions only contain a nonexhaustive list of protected objects to exemplify what are commonly considered as “objects for subsistence.” They may include “objects not directly linked to food and water supply” as objects of comparable subsistence values,⁷³ for example, clothing and basic shelter.⁷⁴ As electricity installations are more than “indirectly linked,” but rather indispensable, it would only be logical to include most of the expressly protected objects in the open definition. Likewise, the prohibition of starvation of the civilian population⁷⁵ also implies that energy supply must be adequately ensured, as it is required for the production, preservation, and processing of foodstuffs and pre-treatment for potable water. In other words, there exists an implicit obligation on the parties to the conflict to protect energy supply installations and other objects required to facilitate energy access by refraining from attacking, destroying, removing them, or rendering them useless.

Although exceptions exist in cases where electric energy installations are used mainly for military purposes and thereby become “military objectives,”⁷⁶ it is also stipulated that “*in no event* shall actions against these objects be taken which *may be expected* to leave the civilian population with such inadequate food or water as to cause its starvation or force its movement.”⁷⁷ This absolute obligation to spare the civilian population, when taken together with the indispensable role of energy supply in food provision and water systems, entails an obligation to ensure at least some provision of energy services to maintain civilian life. This is a core minimum obligation that is closely connected to the absolute prohibition of starvation⁷⁸ and thus can “in no event” be exempt—whether or not the installations constitute military objectives.⁷⁹ This does not even apply in

73. See, e.g., INT’L COMM. OF THE RED CROSS, COMMENTARY ON THE ADDITIONAL PROTOCOLS OF 8 JUNE 1977 TO THE GENEVA CONVENTIONS OF 12 AUGUST 1949, at 655, ¶¶ 2102–03 (Yves Sandoz et al. eds., 1987) [hereinafter ICRC COMMENTARY]; Oeter, *supra* note 69, at 218.

74. See, e.g., ICRC COMMENTARY, *supra* note 73, at 655, ¶ 2103.

75. AP I, *supra* note 32, art. 54(1); AP II, *supra* note 32, art. 14.

76. These are considered “undisputed ‘military objectives.’” Oeter, *supra* note 69, at 184.

77. AP I, *supra* note 32, art. 54(3) (emphasis added).

78. *Id.* art. 54(1); AP II, *supra* note 32, art. 14.

79. “Military objectives” are defined as “objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.” AP I, *supra* note 32, art. 52. The difficulties and controversies in the distinction between military objectives and civilian objects in the case of energy supply installations are discussed in Oeter, *supra* note 69, at 183–85, 219.

cases where a party may derogate from the general obligation within a territory under its own control.⁸⁰

Obligation to Protect 'Works and Installations Containing Dangerous Forces'

It is also generally prohibited in all armed conflict to attack "works or installations containing dangerous forces" including dams, dykes, and "nuclear electrical generating stations" (whether military objectives or not), "if such attack may cause the release of dangerous forces (such as lethal radiation) and consequent severe losses among the civilian population."⁸¹ The *raison d'être* is to "restrict the extent of permissible collateral damage," as destruction of such infrastructure will lead to the release of "uncontrollable forces" that can cause severe damage to the civilian population.⁸² There is also an absolute prohibition to make them the object of reprisals,⁸³ as well as the obligation to avoid locating any military objectives in their vicinity, in order to minimize the risks of incidental attack.⁸⁴

Hence, even if the works and installations have clearly become military objectives, they may not be attacked unless three cumulative conditions are fulfilled: 1) such attack "cannot cause severe losses among the civilian population";⁸⁵ 2) these "works and installations" provide "regular, significant and direct support of military operations," i.e. their total or partial destruction offers a definite military advantage in the circumstances;⁸⁶ and 3) such attack is the only "'feasible way' to terminate the

80. AP I, *supra* note 32, art. 54(5); *see also* General Comment No. 31, *supra* note 35, ¶ 10.

81. AP I, *supra* note 32, art. 56(1); AP II, *supra* note 32, art. 15.

82. Oeter, *supra* note 69, at 221. Note that such prohibition also applies to a Party's own territory under the control of the adverse Party. AP I, *supra* note 32, art. 49(2). However, Article 56 does not prohibit destruction, removal, or being rendered useless of these objects by a government or an Occupying Power exercising control over the territory, unless for military necessity in accordance with Article 53, of GC IV. *Id.* Article 54 of AP I places restrictions on "objects indispensable to the survival of the civilian population." *Id.*; *see also* ICRC COMMENTARY, *supra* note 73, at 669, ¶ 2152; Wall Opinion, *supra* note 40, ¶ 135 (where the ICJ held that the requirement for the exception of absolute military necessity under Art 53, GC IV was not met).

83. AP I, *supra* note 32, art. 56(4).

84. *Id.* art. 56(5).

85. *Id.* art. 56(1). "'Severe' is equivalent to 'important' or 'heavy.'" *See* ICRC COMMENTARY, *supra* note 73, at 669, ¶ 2154.

86. In the case of nuclear electricity generating stations, it is the support by way of providing electric power for military operations. AP I, *supra* note 32, art. 56(2)(b). For dams or dykes, it is the support by their use "for other than its normal function." *Id.* art. 56(2).

support,” i.e. there is no other objective the attack of which would be permissible and capable of achieving an “equal military advantage.”⁸⁷

The level of protection offered by these provisions to power stations is rather unclear. In particular, the scope of the notion “regular, significant and direct support of military operations” is obscured by the fact that most nuclear electrical generating stations are of a multi-purpose nature, as they contain integrated electricity power grids that provide electricity for both civilian and military uses.⁸⁸ What is clear is that merely supplying electricity to multiple destinations does not necessarily satisfy this notion,⁸⁹ such that cases where “normal power stations feeding electric energy into the normal electricity power grid, despite the fact that military installations may also be supplied by the same grid” must fall outside of it.⁹⁰ As far as the access to energy services is concerned, the protection is further weakened, if not substantially undermined, by the fact that attacking electricity lines is recognized as a legally permissible and “relatively easy” feasible alternative to direct attacks on the stations.⁹¹

Obligation to Protect the Natural Environment

The specific obligation to protect the natural environment in armed conflict further supports a claim for energy rights. It expressly prohibits the use of “methods or means of warfare which are intended or may be expected” to cause “widespread, long-term and severe damage” to the natural environment.⁹² It further requires care to be taken to protect the natural environment from such damage,⁹³ while prohibiting attacks

87. Oeter, *supra* note 69, at 223.

88. For general definitions of “regular,” “significant,” and “direct,” see ICRC COMMENTARY, *supra* note 73, at 671, ¶¶ 2162–65. For the difficulties and debates, see Oeter, *supra* note 69, at 223–25; MICHAEL BOTHE, KARL PARTSCH & WALDEMAR A. SOLF, NEW RULES FOR VICTIMS OF ARMED CONFLICTS: COMMENTARY ON THE TWO 1977 PROTOCOLS ADDITIONAL TO THE GENEVA CONVENTIONS OF 1949, at 399 (1982).

89. ICRC COMMENTARY, *supra* note 73, at 672, ¶ 2165.

90. Oeter, *supra* note 69, at 224–25. Note that the Rapporteur of Committee III also acknowledged that the expression “military operations” does not cover the production of civilian objects, even if they are also used by the armed forces. Steering Comm. for Human Rights [CDDH], *Official Records*, ¶ 91, CDDH/215/Rev/1 (Vol. XV) (1975); ICRC COMMENTARY, *supra* note 73, at 672, ¶ 2165.

91. ICRC COMMENTARY, *supra* note 73, at 672, ¶ 2166.

92. AP I, *supra* note 32, arts. 35(3), 55(1); see also Nuclear Weapons Opinion, *supra* note 31, ¶ 31; Protection of the Environment in Times of Armed Conflict, G.A. Res. 47/37, ¶ 5, U.N. Doc. A/RES/47/37 (Nov. 25, 1992) (stating that “destruction of the environment, not justified by military necessity and carried out wantonly, is clearly contrary to existing international law.”).

93. AP I, *supra* note 32, art. 55(1).

against the natural environment “by way of reprisals.”⁹⁴ This constitutes an absolute prohibition against widespread, long-term, and severe environmental damage, which, unlike certain acts of hostilities, may not be justified even by military necessity.⁹⁵ It also covers both intentional and purely unintentional, so-called incidental infliction of damage, as well as damage inflicted to “prejudice the health or survival of the population.”⁹⁶ In light of evidence of widespread *opinio juris* and increasing state practice, some have argued that equivalent customary norms have emerged with regard to, at the very least, the general prohibition against intended, manifestly superfluous, damage to the environment.⁹⁷

These prohibitions are relevant not only because the relevant UN definition of severe contains a reference to “serious or significant disruption or harm to, human life or natural resources,”⁹⁸ but also because compliance with these restrictions on the methods of warfare would have the necessary effect of sparing natural energy resources and installations in armed conflict.⁹⁹ Although some have considered the scope of application of these provisions restricting methods of combat to be rather limited,¹⁰⁰ and the threshold of the widespread, long-term, and severe too

94. *Id.* art. 55(2). Likewise, severe manipulation of the environment as a weapon is also prohibited under the ENMOD Convention. Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, G.A. Res. 31/72 Annex (ENMOD), ¶¶ 5–7, U.N. Doc. A/RES/31/72 (May 18, 1977). However, the relationship between the prohibitions in AP I and the ENMOD Convention is not clear-cut. See Oeter, *supra* note 69, at 132–33 n.75.

95. See ICRC COMMENTARY, *supra* note 73, at 411–14, ¶¶ 1444–49; Oeter, *supra* note 69, at 132.

96. AP I, *supra* note 32, art. 55(1).

97. Oeter, *supra* note 69, at 134; Comm. established to Review the NATO Bombing Campaign against the Fed. Rep. of Yugoslavia, Final Rep. to the Prosecutor, ¶ 15, U.N. Doc. PR/P.I.S./510-E (June 13, 2000) [hereinafter ICTY Committee Report]. Note the possible exception of damage caused by nuclear weapons in Nuclear Weapons Opinion, *supra* note 31, ¶ 33.

98. U.N. Comm. on Disarmament, Rep. of the Conference of the Comm. on Disarmament, Sept. 21–Dec. 22, 1976, 91, U.N. Doc. A/31/27; GAOR, 31st Sess., Supp. No. 27 (1976).

99. For example, “damage to the natural environment” in the conflicts in the Former Yugoslavia was considered to include the release of pollutants caused by “attacks on industrial facilities such as chemical plants and oil installations.” ICTY Committee Report, *supra* note 97, ¶ 14.

100. The standard of “widespread, long-term and severe damage” has been considered by some to limit the application of the provisions to only “very significant damage.” ICTY Committee Report, *supra* note 97, ¶ 15. For example, the ICTY Committee concluded that the “environmental damage caused during the NATO bombing campaign [did not] reach the very high Additional Protocol I threshold.” *Id.* ¶ 17. Similarly, The Balkan Task Force was of the view that despite some “environmental hot spots,” contamination,

ambiguous,¹⁰¹ it is argued that they are at least capable of protecting natural energy resources, to the extent that they seek to prohibit severe “interference with human life and natural resources” in international armed conflict.¹⁰²

Obligation to Protect Civilian Objects

Protection of civilian objects, while more general, is also relevant to the question of energy access as essential to a comprehensive protection related to the survival of the civilian population. The core obligation to protect civilian objects is based on one of the cornerstones of international humanitarian law: the distinction between civilian population and objects on the one hand, and military objectives on the other.¹⁰³ Such a fundamental distinction entails the prohibition on indiscriminate attacks¹⁰⁴ and requires parties to a conflict to do everything feasible to distinguish between the two, including verifying whether the objects are subject to protection, and “in particular whether they are works and installations containing dangerous forces.”¹⁰⁵ Additionally, customary international humanitarian law provides that civilian objects must not be made the object of attack or of reprisals, except for such time that they become military objectives.¹⁰⁶ Even during operations against military objectives, parties must also take “constant care” to spare civilian objects (as well as civilians and civilian population).¹⁰⁷ In case of doubt, there is a presumption against treating an object which is “normally dedicated to civilian purposes” as military objectives.¹⁰⁸

Civilian objects are defined under customary international humanitarian law as “objects which are not military objectives,” whereas “military objectives” are “limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and

and serious pollution detected which posed “a threat to human health,” the damage in “the Kosovo conflict has not caused an environmental catastrophe affecting the Balkans region as a whole.” Joint UNEP/UNCHS Balkan Task Force, *The Kosovo Conflict: Consequences for the Environment and Human Settlements* 11 (1999), available at <http://www.grida.no/inf/news/news99/finalreport.pdf>.

101. See Oeter, *supra* note 69, at 133 n.78.

102. *Id.* at 131.

103. Henckaerts & Doswald-Beck, *supra* note 16, at 17, ¶ 96 & 143, ¶ 59.

104. For definitions see AP I, *supra* note 32, arts. 51(4)–(5).

105. *Id.* art. 57(2)(a)(i); ICRC COMMENTARY, *supra* note 73, at 680, ¶ 2194.

106. AP I, *supra* note 32, arts. 48, 52(1). Article 52(1) has now formed part of customary international humanitarian law. Henckaerts & Doswald-Beck, *supra* note 16, at 149–59.

107. AP I, *supra* note 32, art. 57.

108. *Id.* art. 52(3).

whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.”¹⁰⁹ Although objects commonly used for facilitating access to energy services are not expressly referred to as objects normally dedicated to civilian purposes, such as “a place of worship, a house or other dwelling or a school,”¹¹⁰ the notion of civilian objects is capable of encompassing energy-related objects like electric energy installations, provided that they have not clearly become military objectives such due to predominantly military use and effective military contribution. In this sense, the general protection of civilian objects can potentially fill in the gaps and protect energy-related objects falling outside the categories of specific protected objects, such as “objects indispensable to the survival of the civilian population”¹¹¹ and “works and installations containing dangerous forces.”¹¹²

Obligation to Protect Property

Likewise, the prohibition of destruction of property under international humanitarian law arguably implies a corresponding obligation to respect and protect energy-related property in armed conflict. The Hague Regulations forbid the unnecessary destruction or seizing of any property in the territory involved in a war.¹¹³ The Fourth Geneva Convention prohibits only destruction by the Occupying Power in occupied territory,¹¹⁴ but covers “all property (real or personal), whether it is the private property of protected persons (owned individually or collectively), State property, that of the public authorities (districts, municipalities, provinces, etc.) or of co-operative organizations.”¹¹⁵ The broad notion of property for protection arguably includes energy-related property. It should be noted that the possible exceptions of imperative military necessities to both of these rules do not take away the applicability of the general prohibition, but

109. *Id.* art. 52(2); Henckaerts & Doswald-Beck, *supra* note 16, at 15, 21–22, 141–47.

110. AP I, *supra* note 32, art. 52(3).

111. *Id.* art. 54(2); AP II, *supra* note 32, art. 14.

112. AP I, *supra* note 32, art. 56(1); AP II, *supra* note 32, art. 15.

113. The Fourth Hague Convention expresses that it is “especially forbidden” to “destroy or seize the enemy’s property, unless such destruction or seizure be imperatively demanded by the necessities of war.” Hague Convention (IV) Respecting the Laws and Customs of War on Land and Its Annex: Regulations Concerning the Laws and Customs of War on Land, art. 23(g), Oct. 18, 1907, 36 Stat. 2277 [hereinafter Hague Regulations].

114. GC IV, *supra* note 32, art. 53.

115. Int’l Comm. of the Red Cross, *Commentary on Convention (IV) relative to the Protection of Civilian Persons in Time of War, Geneva, 12 August 1949*, ¶¶ 1–2 (1949) [hereinafter ICRC, *GC IV Commentary*], available at <http://www.icrc.org/ihl.nsf/COM/380-600060?OpenDocument>.

merely reflect the realities of war: hostilities driven by military ambitions and operations.

War Crimes and Grave Breaches of the Geneva Conventions

The fact that a number of prohibited acts of hostilities against civilian objects, property, and the natural environment have been criminalized as war crimes (some of which also constitute grave breaches of the Geneva Conventions) falling within the jurisdiction of the International Criminal Court (“ICC”) and giving rise to individual criminal responsibility further reinforces the inference of an individual entitlement to energy access in armed conflict. Examples include:¹¹⁶

- [E]xtensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly;¹¹⁷
- Intentionally directing attacks against civilian objects, that is, objects which are not military objectives;¹¹⁸
- Intentionally launching an attack in the knowledge that such attack will cause incidental . . . damage to

116. Although the actual deterrent effects of these war crimes are somehow uncertain, this does not diminish their value as evidence of the will of the international community to prohibit certain acts of hostilities, which could have seriously disrupted access to energy services during armed conflict. See ICTY Committee Report, *supra* note 97, ¶¶ 20–21; see also Thilo Marauhn, *Environmental Damage in Times of Armed Conflict – Not ‘Really’ a Matter of Criminal Responsibility?* 840 INT’L REV. RED CROSS 1029, 1029–36 (2000), available at <http://www.icrc.org/eng/resources/documents/misc/57jqtb.htm>; Judith Gail Gardam, *Proportionality and Force in International Law*, 87 AM. J. INT’L L. 391, 404–10 (1993).

117. ICC Statute, *supra* note 33, art. 8(2)(a)(iv); Geneva Convention Relative for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, art. 50, Oct. 21, 1950, 6 U.S.T. 3114, 75 U.N.T.S. 31; Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, art. 51, Oct. 21, 1950, 6 U.S.T. 3217, 75 U.N.T.S. 85; GC IV, *supra* note 32, art. 147. Cf. Hague Regulations, *supra* note 113, art. 23(g). See, for example, the separate opinion of Judge Elaraby in the Wall Opinion stating:

Israel has committed grave breaches. The pattern and the magnitude of the violations committed against the non-combatant civilian population in the ancillary measures associated with constructing the wall, are, in my view, ‘extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly’ (Fourth Geneva Convention, Art. 147).

Wall Opinion, *supra* note 40, ¶ 3.3 (separate opinion of Judge Elaraby).

118. ICC Statute, *supra* note 33, art. 8(2)(b)(ii); AP I, *supra* note 32, arts. 48, 52.

civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.¹¹⁹

- Destroying or seizing the enemy's property unless such destruction or seizure be imperatively demanded by the necessities of war [in international armed conflict]¹²⁰ (cf. "Destroying or seizing the property of an adversary unless such destruction or seizure be imperatively demanded by the necessities of the [non-international] conflict").¹²¹

Obligation to Provide Accommodation and Food

Another relevant obligation under international humanitarian law is providing protected persons, persons deprived of liberty, and prisoners of war with a number of provisions, some of which cannot be fulfilled without access to energy services, such as adequate shelter, food, and water facilities. Protected persons are persons who "find themselves, in case of a conflict or occupation, in the hands of a Party to the conflict or Occupying Power of which they are not nationals."¹²² There is a detailed obligation incumbent upon the Detaining Power, in interning protected persons, to

[t]ake all necessary and possible measures to ensure that protected persons shall, from the outset of their internment, be accommodated in buildings or quarters which afford every possible safeguard as regards hygiene and health, and provide efficient protection against the rigours of the climate and the effects of the war The premises shall be fully protected from dampness, adequately heated and lighted, in particular between dusk and lights out. The sleeping quarters shall be sufficiently spacious and well ventilated, and the internees shall have suitable bedding and sufficient blankets, account being taken of the climate, and the age, sex, and state of health of the internees They shall be provided with sufficient water and soap for their daily personal toilet

119. ICC Statute, *supra* note 33, art. 8(2)(b)(iv); AP I, *supra* note 32, arts. 55, 56, 57. Note that this "admits the possibility of lawful . . . collateral damage." See *Customary IHL – Section B. Determination of the anticipated military advantage*, ICRC, http://www.icrc.org/customary-ihl/eng/docs/v2_cha_chapter4_rule14_sectionb (last visited Mar. 21, 2012).

120. ICC Statute, *supra* note 33, art. 8(2)(b)(xiii).

121. *Id.* art. 8(2)(e)(xii).

122. GC IV, *supra* note 32, art. 4. Note the exceptions for nationals of a non-state party to the Convention, a neutral state, and a co-belligerent state while their national state has "normal diplomatic representation in the State in whose hands they are." *Id.*

and for washing their personal laundry; installations and facilities necessary for this purpose shall be granted to them. Showers or baths shall also be available.¹²³

Despite the absence of an explicit obligation of access to energy services for protected persons, the obligation is implicit in a number of the express obligations. These include the obligations to “provide efficient protection against the rigours of the climate”; ensure the premises to be “fully protected from dampness, adequately heated and lighted, in particular between dusk and lights out”; ensure proper ventilation; take the climate into account; and to provide “installations and facilities necessary” for daily water supplies.¹²⁴ Arguably, none of these concurrent obligations towards the protected persons can be adequately achieved without access to electricity, implying an obligation to provide access to energy services (or the benefits of such access). These obligations are likewise applicable in non-international armed conflict, where persons who are deprived of liberty “for reasons related to the armed conflict, whether they are interned or detained” are entitled to “safeguards as regards health and hygiene and protection against the rigours of the climate and the dangers of the armed conflict.”¹²⁵ In the prisoner of war context of international armed conflict, it is explicitly stated that “[t]he premises provided for the use of prisoners of war . . . shall be entirely protected from dampness and adequately heated and lighted, in particular between dusk and lights out.”¹²⁶ This obligation is essentially identical to one of the specific duties towards protected persons.¹²⁷ Thus, the same implied obligation should apply, *mutatis mutandis*, to the treatment of prisoners of war.¹²⁸ Such an interpretation of an implied obligation can likewise be read into the specific obligation to provide internees and prisoners of war with the means by which they can prepare food for themselves.¹²⁹

Obligation of Humane Treatment and Medical Care

In addition to the obligations with respect to detained persons, there is an overriding principle of the right to humane treatment of all persons *hors de combat*—“including members of armed forces who have laid

123. *Id.* art. 85.

124. *Id.*

125. AP II, *supra* note 32, art. 5(1)(b); *see also id.* art. 4 (“fundamental guarantees”).

126. Geneva Convention Relative to the Treatment of Prisoners of War of 12 August 1949, art. 25, Aug. 12, 1949, T.I.A.S. 3364, 75 U.N.T.S. 135 [hereinafter GC III].

127. GC IV, *supra* note 32, art. 85.

128. *See infra* the right to adequate housing.

129. GC IV, *supra* note 32, art. 89; GC III, *supra* note 126, art. 26. *Cf.* the right to food discussed below.

down their arms, and those placed hors de combat by sickness, wounds, detention, or any other cause” in non-international armed conflict,¹³⁰ must be “in all circumstances . . . humanely treated . . . without any adverse distinction.”¹³¹ That the principles of humanity, inherent to international humanitarian law and human rights law, guide all parties, even in cases not covered by existing rules is supported by the Martens Clause¹³² and the first two Additional Protocols to the Geneva Conventions, which expressly require protection of all persons in accordance with the principles of humanity and the “dictates of public conscience.”¹³³

The obligation to provide medical care and attention to those in need in armed conflict, and their respective rights to receive such care, must be understood in the context of this important principle.¹³⁴ It is an obligation incumbent on everyone (including members of armed forces and the civilian population) to respect and protect the “wounded, sick and shipwrecked.”¹³⁵ The infirm must be treated humanely and are entitled to receive the medical care and attention required by their condition “to the fullest extent practicable and with the least possible delay.”¹³⁶ Likewise, persons who are deprived of their liberty¹³⁷ have the “benefit of medical examinations”¹³⁸ and their “physical or mental health and integrity” must not be “endangered by any unjustified act or omission.”¹³⁹

130. GC IV, *supra* note 32, art. 3(1).

131. *Id.* art. 3(1); AP I, *supra* note 32, art. 75(1); AP II, *supra* note 32, art. 4(1); GC IV, *supra* note 32, art. 27.

132. The Martens Clause provides that civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, principles of humanity, and the dictates of public conscience even in cases where specific international agreements do not apply. See Helmut Strebel, *Martens' Clause*, in 3 MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW 326–27 (Rudolf Bernhardt ed., 1992); Rep. of the Int'l Law Comm'n, ¶ 317, 46th Sess., 2 May–July 22, 1994, U.N. Doc. A/49/10; GAOR, 49th Sess., Supp. No. 10 (1994).

133. AP I, *supra* note 32, art. 1(2); AP II, *supra* note 32, pmb. ¶ 4; see also Dieter Fleck, *The Law of Non-International Armed Conflicts*, in IHL HANDBOOK, *supra* note 28, at 619–20.

134. See ICRC COMMENTARY, *supra* note 73, at 146, ¶ 444.

135. See *id.* at 1408, ¶ 4635.

136. AP I, *supra* note 32, art. 10(1); AP II, *supra* note 32, art. 7(2).

137. Note the exceptions to “protected persons.” ICRC COMMENTARY, *supra* note 73, at 153–54, ¶ 470.

138. AP II, *supra* note 32, art. 5(2)(d). This provision aims to ensure, generally, good medical attention in places of internment or detention and that contagious diseases are detected in time. *Id.*; see ICRC COMMENTARY, *supra* note 73, at 1391, ¶ 4587.

139. AP I *supra* note 32, art. 11(1); AP II, *supra* note 32, art. 5(2)(e). “The interpretation of these two purely humanitarian provisions is identical.” ICRC COMMENTARY, *supra* note 73, at 1391, ¶ 4588.

The prohibition of endangering physical health implicates the obligation to ensure energy access, because it is crucial for the availability and quality of medical care, may disrupt the functioning of the general healthcare system, and the lack of access can endanger the physical health of those requiring treatment.¹⁴⁰ Noting that the examples of prohibited acts in these provisions are subject to further development, “depending on the circumstances and the goodwill of those responsible,”¹⁴¹ it is imperative that an implied obligation to ensure energy access for medical purposes in armed conflict is taken into consideration.

Similar obligations with regard to medical care can also be read into certain rules governing the Occupying Power in occupied territory. One obligation is to ensure that “the medical needs of the civilian population in occupied territory continue to be satisfied.”¹⁴² It is specifically prohibited to requisition resources that are necessary for either “the provision of adequate medical services for the civilian population” (such as vaccination as prophylactic measures)¹⁴³ or “for the continuing medical care of any wounded and sick already under treatment”¹⁴⁴ (such as the heating system which arguably forms an integral part of the unit).¹⁴⁵ Since electricity is undoubtedly indispensable to the proper functioning of adequate medical services and the provision of medical care, equipment and materials necessary to facilitate energy access to the medical units are also implicitly included and hence cannot be requisitioned. The Occupying Power also has the obligation to ensure and maintain the “medical and hospital establishments and services, public health and hygiene in the occupied territory, with particular reference to the adoption and application of the prophylactic and preventive measures necessary to combat the spread of contagious diseases and epidemics.”¹⁴⁶ Such measures cannot

140. Since physical health can be endangered by, for example, “allowing a wound to become infected through lack of hygiene or care,” it can also be endangered by the non-provision of energy services for medical purposes, which admittedly lead to more life-threatening consequences. ICRC COMMENTARY, *supra* note 73, at 152, ¶¶ 462, 466; see *supra* *Energy as the Key to Survival in Armed Conflict*, p. 582 and note 21.

141. ICRC COMMENTARY, *supra* note 73, at 1389, ¶ 4581.

142. AP I, *supra* note 32, art. 14(1)–(3).

143. ICRC COMMENTARY, *supra* note 73, at 184–85, ¶ 592(a).

144. AP I, *supra* note 32, art. 14(2).

145. ICRC COMMENTARY, *supra* note 73, at 183, ¶ 587.

146. GC IV, *supra* note 32, art. 56. Examples of these “prophylactic and preventive measures” include supervision of public health, education of the general public, the distribution of medicines, the organization of medical examinations and disinfection, the establishment of stocks of medical supplies, the dispatch of medical teams to areas where epidemics are raging, the isolation and accommodation in hospitals of people suffering

be effective unless there is adequate access to energy services (e.g. for hygiene maintenance and vaccine refrigeration) and therefore the same implicit obligations exist as to an energy right.

*Obligation to Provide "Supplies Essential to the Survival of the Civilian Population"*¹⁴⁷

The Occupying Power also has the specific obligation to ensure the provision of, *inter alia*, "means of shelter" and "other supplies essential to the survival of the civilian population of the occupied territory," "to the fullest extent of the means available to it and without any adverse distinction."¹⁴⁸ This latter phrase designates "a positive, complete requirement on the Occupying Power to use all means available to provide the supplies in question" as well as the obligation "to arrange for other steps to be taken if it could not supply the requirements in question from its own resources or those of the occupied territory."¹⁴⁹ This interpretation broadens the obligation responsibility of the Occupying Power in the sense that mere local resource scarcity cannot constitute a valid excuse for inadequate provisions.

In addition to the obligation to provide food and medical supplies,¹⁵⁰ arguably there is an obligation to provide adequate shelter to the civilian population in recognition that it is possible to "suffer, and even die, from heat or cold."¹⁵¹ In order to adequately protect the inhabitants against the rigours of the climate, a shelter needs to have access to electricity in some form. In fact, as indicated by the word "other," the list of essential supplies in the provision is nonexhaustive and other unmentioned items, depending on the local conditions, may fall within the category of "other supplies essential to the survival of the civilian population of the occupied territory."¹⁵² It has been suggested that "fuel might be essential in a cold region."¹⁵³ By analogy, it is argued that supply of electricity and supplies essential to the provision of energy services can be read into the

from communicable diseases, and the opening of new hospitals and medical centers. See ICRC COMMENTARY, *supra* note 73, at 314.

147. See, e.g., AP II, *supra* note 32, art. 14 ("Protection of objects indispensable to the survival of the civilian population").

148. AP I, *supra* note 32, art. 6(1) (emphasis added).

149. ICRC COMMENTARY, *supra* note 73, at 812-13, ¶ 2783.

150. GC IV, *supra* note 32, art. 55.

151. ICRC COMMENTARY, *supra* note 73, at 812, ¶ 2779.

152. *Id.* at 812, ¶ 2780.

153. *Id.*

category of other supplies, forming part of the obligation.¹⁵⁴ It is also useful to add that to recognize that particular local conditions may lead to different levels of energy needs access does not take away the universality of the right itself in principle but rather affirms its importance in realizing basic, human needs everywhere, albeit to varying extents.

It is further argued that despite its ruling, the Israeli Supreme Court has implicitly recognized the vital importance of electricity service provision in situations of armed conflict, including that of an occupied territory, in the *Fuel and Electricity Case*.¹⁵⁵ In specifying that the obligation imposed on Israel to allow the passage¹⁵⁶ of electricity and fuel to the Gaza Strip is derived from the “vital humanitarian needs of the residents of the civilian population,”¹⁵⁷ and in finding that Israel “allows supply of fuel and electricity in the amount needed for the vital humanitarian needs in the area,”¹⁵⁸ the Court implicitly regarded electricity and fuel as essential goods. Although the outcome of the case has been criticized for, *inter alia*, the court’s overreliance on the “somewhat vague standard”¹⁵⁹ of what constitutes vital humanitarian needs, such judicial recognition of the importance of energy services bears certain significance.¹⁶⁰

Obligation to Fulfill the Right to Humanitarian Assistance

The obligation pertaining to the right to humanitarian assistance is of particular relevance to the case of energy services, since deprivation often occurs due to resource scarcity or the apparent inability to provide the population within the territory. Hans-Peter Gasser has stated that the obligation to treat civilians *hors de combat* humanely “not only means the prohibition of certain behaviour but also an obligation to act.”¹⁶¹ The general principle is that when the civilian population is inadequately supplied with indispensable goods¹⁶² as a result of the conflict, they have the right to receive humanitarian assistance, i.e. relief actions must be

154. See *supra* *Obligation to Protect Objects Indispensable to the Survival of the Civilian Population*, p. 590–92.

155. *Fuel and Electricity Case*, *supra* note 22.

156. Obligations to allow passage are found in GC IV, *supra* note 32, arts. 23, 38; AP I, *supra* note 32, art. 70; AP II, *supra* note 32, art. 18(2); see *infra* *Obligation to Fulfill the Right to Humanitarian Assistance*.

157. *Fuel and Electricity Case*, *supra* note 22, ¶ 11.

158. *Id.* ¶ 19.

159. U.N. Palestine Report, *supra* note 24, ¶ 1306.

160. *Fuel and Electricity Case*, *supra* note 22, ¶¶ 3, 4, 5, 9, 11, 17, 21, 22.

161. Hans-Peter Gasser, *Protection of the Civilian Population*, in IHL HANDBOOK, *supra* note 28, at 237, 269.

162. GC IV, *supra* note 32, art. 69, and the discussion above.

undertaken.¹⁶³ Closely linked to the obligation to protect “objects indispensable to the survival of the civilian population,”¹⁶⁴ the obligation upon parties to an armed conflict to allow passage of indispensable goods¹⁶⁵ through the territory under its control is considered to have attained the status of customary international humanitarian law,¹⁶⁶ binding on even non-state parties to the Additional Protocol I.

In international armed conflict, proposed relief actions for the civilian population under the control of an adverse party may be undertaken only with the agreement of that adverse party. Likewise, relief actions cannot be undertaken to assist the civilian population of a party to an armed conflict without the agreement of the other parties to the conflict, i.e. the Parties concerned.¹⁶⁷ In occupied territory, the Occupying Power is under an obligation to accept relief action unless it has other means of meeting the essential needs of the civilian population of the occupied territory itself.¹⁶⁸ Even in the *Fuel and Electricity Case*, where the provision of fuel and electricity by Israel was held to be sufficient,¹⁶⁹ the humanitarian obligations on Israel to allow “rapid and unimpeded passage” of vital humanitarian goods required for the survival of the civilian population to the Gaza Strip, and to “refrain from causing intentional injury to humanitarian installations” were not disputed.¹⁷⁰ In non-international armed conflict, relief actions by an impartial and nondiscriminatory humanitarian organization to the civilian population that is “suffering undue hardship

163. GC IV, *supra* note 32, arts. 23, 38; AP I, *supra* note 32, arts. 70–71; AP II, *supra* note 32, art. 18(2). GC IV imposes an obligation on third states to allow free passage for the relief actions. GC IV, *supra* note 32, arts. 23, 59. Likewise, Article 81 of AP I imposes said obligation for “humanitarian initiative” of the ICRC. *See generally* Gasser, *supra* note 161, at 237, 243–44, 269–70 (on relief actions and humanitarian assistance); *see also* Humanitarian Assistance to Victims of Natural Disasters and Similar Emergency Situations, G.A. Res. 43/131, U.N. Doc. A/RES/43/131 (Dec. 8, 1988); Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.), Judgment, 1986 I.C.J. 14, ¶ 242 (where the ICJ stated that “the provision of strictly humanitarian aid cannot be regarded as unlawful intervention, or as in any other way contrary to international law”).

164. AP I, *supra* note 32, art. 54. *See supra* *Obligation to Protect Objects Indispensable to the Survival of the Civilian Population*, n. 79.

165. AP I, *supra* note 32, art. 70. It has been suggested that Articles 54 and 70 of AP I should be read together. *See* ICRC COMMENTARY, *supra* note 73, at 820, referred to in *Fuel and Electricity Case*, *supra* note 22, ¶ 14.

166. *See* Henckaerts & Doswald-Beck, *supra* note 16, at 1162–65 which is also referred to in *Fuel and Electricity Case*, *supra* note 22, ¶ 14.

167. AP I, *supra* note 32, art. 70(1).

168. *See id.* arts. 59, 69(2), 71; GC IV, *supra* note 32, arts. 59–62, 108–11; *see also* ICRC COMMENTARY, *supra* note 73, ¶ 2784.

169. *Fuel and Electricity Case*, *supra* note 22, ¶ 22.

170. *Id.* ¶¶ 13–15.

owing to a lack of the supplies essential for its survival” may not be refused, and to the requisite consent of “the High Contracting Party concerned” may be presumed in case of doubt over which are the authorities.¹⁷¹ In light of the right to assistance under the principle of humanity, it is arguable that so long as the civilian population is inadequately supplied and the party controlling the territory is unable to provide the necessary assistance itself, it will have virtually little room to reject a proposed relief operation.¹⁷²

As seen from the above list of obligations upon States, there are a number of existing norms of international humanitarian law relevant to the respect, protection, and provision of energy services to individuals affected by armed conflict. All these obligations point implicitly to the individual’s entitlement to energy as an indispensable means of survival, which must be duly recognized and protected. However, international humanitarian law has its inherent gaps and limitations. Although underpinned by principles of proportionality, humanity and the protection of persons *hors de combat*, as the law of war, it also seeks to protect military necessity and accepts incidental or collateral damage. In contrast, these two recurrent exceptions do not exist in human rights law which, as will be shown below, further substantiates a case for the right to energy as a right that is applicable at all times.

IV. ACCESS TO ENERGY AS A UNIVERSAL HUMAN RIGHT

The Case for Human Rights

Access to energy is a basic need of every human being, hence should be considered “part and parcel of human dignity which the state must respect, protect and fulfill unconditionally.”¹⁷³ However, in view of the energy-related humanitarian disasters that occur in times of armed conflict, the current protection actually offered to the individual in this aspect is vastly inadequate and ineffective. It is therefore imperative to provide a better solution to the energy problem: by utilizing the potential

171. AP II, *supra* note 32, art. 18(2); *see also* ICRC COMMENTARY, *supra* note 73, art. 18(2), at 1479, ¶¶ 4884–85.

172. *See, e.g.*, Mary Ellen O’Connell, *Humanitarian Assistance in Non-international Armed Conflict: The Fourth Wave of Rights, Duties and Remedies*, 3 *ISR. Y.B. ON HUM. RTS.* 183–217 (2001); S.C. Res. 688, U.N. Doc. S/RES/0688 (Apr. 5, 1991) (demanding that Iraq allow humanitarian assistance by the international community to enter the country).

173. Eibe Riedel, *The Human Right to Water and General Comment No. 15 of the CESCR*, in *THE HUMAN RIGHT TO WATER* 19, 26 (Eibe Riedel & Peter Rothen eds., 2006).

of the existing international legal mechanism to the fullest.¹⁷⁴ To this end, a human rights approach should serve to bridge any protection gaps. It has the “potential to achieve access to energy for all individuals,”¹⁷⁵ by formally recognizing and operationalizing the basic need,¹⁷⁶ imposing binding obligations on states to respect, protect and fulfill the right,¹⁷⁷ as well as prescribing remedies for violations¹⁷⁸ and leading to better compliance.¹⁷⁹ In a broad sense, it can also empower individuals by connecting them to “the empowering potential of human rights.”¹⁸⁰

Access to Energy as an Implied Right

As will be shown below, access to energy is an implied human right meaning that, although the major human rights instruments—like the provisions in IHL—are silent on the point, it is arguably an implicit attribute of a number of human rights and underpins their practical realization.¹⁸¹ This is apparent most notably in the Convention on the Elimination of Discrimination against Women (“CEDAW”) and the ICESCR,¹⁸² as seen below.

Preliminarily, the explicit reference to electricity in CEDAW under the right of women to adequate living conditions supports the case for the

174. Bradbrook & Gardam, *supra* note 6, at 414.

175. See generally Stephen Tully, *The Human Right to Access Clean Energy*, 3 J. GREEN BUILDING 140 (2008) [hereinafter Tully, *Clean Energy*].

176. *Id.* at 143.

177. Bradbrook & Gardam, *supra* note 6, at 412.

178. See Melina Williams, *Privatization and the Human Right to Water: Challenges for The New Century*, 28 MICH. J. INT'L L. 469, 477–78 (2007) (pointing out that such a remedy is currently missing and potentially difficult to enforce).

179. Arguably, the creation of specific human rights norms will be more effective than reinforcing compliance with the existing rules of international humanitarian law, as societies that do not normally respect human rights in peacetime are less likely to respect international humanitarian law during armed conflict. See Louise Doswald-Beck, *Can Law Ensure Humanitarian Behaviour?*, GLOBE, Spring 2010, at 10, 11.

180. CESCR Statement on Poverty, *supra* note 7, ¶ 6; see also Tully, *Human Right to Access Electricity*, *supra* note 7, at 143.

181. Tully, *Clean Energy*, *supra* note 175, at 140; see also Bradbrook & Gardam, *supra* note 6, at 405; Tully, *Human Right to Access Electricity*, *supra* note 7, at 140.

182. Note that human rights codification is a “dynamic and evolving process,” in which silence of the instruments cannot preclude the subsequent development of specific human rights norms. World Conference on Human Rights, June 14–25, 1993, *Vienna Declaration and Program of Action*, ¶ 26, U.N. Doc. A/CONF.157/23 (July 12, 1993); CESCR, *Substantive Issues Arising in the Implementation of the Int'l Cov. on Econ., Soc. & Cultural Rights: The Right to Adequate Water*, 29th Sess., Nov. 11–29, 2002, U.N. Doc. E/C.12/2002/11 (Jan. 20, 2003) [hereinafter General Comment No. 15]; Riedel, *supra* note 173, at 23–24.

right to energy and its equal standing to the other related rights, such as the rights to adequate housing, water and sanitation, transport, and communication.¹⁸³ Likewise, as access to modern energy services is an essential component in the effective realization of many human rights under the ICESCR, the existence of this right is necessarily inferred.¹⁸⁴

The Right to an Adequate Standing of Living

The right to an adequate standing of living under the ICESCR¹⁸⁵ by extension relates necessarily to “all of the economic, social, and cultural rights.”¹⁸⁶ The express content of this right encompasses the rights to “adequate housing, food, clothing, and to the continuous improvement of living conditions.”¹⁸⁷ Therefore, energy is implicitly included in this nonexhaustive list.¹⁸⁸

The CESCR made it clear that the right to adequate housing includes as factors “sustainable access to natural and common resources, safe drinking water, *energy for cooking, heating and lighting*, sanitation and washing facilities, means of food storage, refuse disposal, site drainage and emergency services” that must be taken into account in determining whether the obligation is fulfilled.¹⁸⁹ The UN Special Rapporteur on adequate housing went further to state that the right includes “access to es-

183. Convention on the Elimination of All Forms of Discrimination Against Women, art. 14(2)(h), Dec. 18, 1979, 1249 U.N.T.S.13 [hereinafter CEDAW].

184.

Energy supports the provision of basic needs such as cooked food, a comfortable living temperature, lighting, the use of appliances, piped water or sewerage, essential health care (refrigerated vaccines, emergency and intensive care), education aids, communication and transport. Energy also fuels productive activities, including agriculture, commerce, manufacture, industry, and mining.

Bradbrook & Gardam, *supra* note 6, at 393 (citing WEA 2000, *supra* note 9, at 3); WEA 2000, *supra* note 9, at 44. *See generally* Brundtland Report, *supra* note 6; UNDP, *Energy and Major Global Issues*, in ENERGY AFTER RIO: PROSPECTS AND CHALLENGES § 2.1.1.1 (1997).

185. ICESCR, *supra* note 50, art. 11. *Cf.* Universal Declaration of Human Rights, G.A. Res. 217 (III) A, ¶ 25.1, U.N. Doc. A/RES/217 (III) (Dec. 10, 1948) [hereinafter UDHR].

186. MATTHEW CRAVEN, THE INTERNATIONAL COVENANT ON ECONOMIC, SOCIAL AND CULTURAL RIGHTS: A PERSPECTIVE ON ITS DEVELOPMENT 292 (1995).

187. ICESCR, *supra* note 50, art. 11(1).

188. Bradbrook & Gardam, *supra* note 6, at 408.

189. CESCR, Substantive Issues Arising in the Implementation of the Int’l Cov. on Econ., Soc. & Cultural Rights: The Right to Adequate Housing, ¶ 8(b), 5th Sess., U.N. Doc. E/1992/23 (Dec. 12, 1991) [hereinafter General Comment 4] (emphasis added).

sential civic services” such as “water, *electricity* and sanitation.”¹⁹⁰ The right to adequate food, contained in the right to an adequate standard of living, imposes obligations of measures to “improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge.”¹⁹¹ Additionally it requires parties to ensure that the food available is of sufficient quality to “satisfy the dietary needs of individuals” and be “free from adverse substances.”¹⁹² The fact that access to energy is needed to enhance food safety, protection, and preservation¹⁹³ reinforces its implied existence as, in short, energy is “central to the satisfaction of basic nutrition and health needs,” and therefore underpins the right to adequate food.¹⁹⁴

The Right to the Highest Attainable Standard of Health

Similarly, the right to health cannot be fully realized if there is no access to energy services.¹⁹⁵ From basic medical facilities and health services to public hygiene, water, and sanitation systems, the health of every individual inevitably depends on the availability of energy services. The CESCR has recognized that the right to health depends upon “the realization of other human rights” that address the right to health’s integral components.¹⁹⁶ Arguably, the right to energy is one of these component rights. It is integral to ensuring that health services are “scientifically and medically appropriate and of good quality,” by powering hospital equipment, systems for safe potable water, and for the provision of adequate

190. Special Rapporteur on the Right to Adequate Housing, *The Realization of Economic, Social, and Cultural Rights*, ESCOR, ¶ 99, U.N. Doc. E/CN.4/Sub.2/1995/12 (July 12, 1995) (by Rajindar Sachar).

191. ICESCR, *supra* note 50, art. 11(2)(a).

192. CESCR, Substantive Issues Arising in the Implementation of the Int’l Cov. on Econ., Soc. & Cultural Rights: The Right to Adequate Food, ¶ 8, 20th Sess., Apr. 26–May 14, 1999, U.N. Doc. E.C.12/1999/5 (May 12, 1999) [hereinafter General Comment No. 12].

193. Tully, *Universal Energy Access*, *supra* note 6, at 525.

194. *Id.* at 529 (citing UNDP, *Energy After Rio: Prospects and Challenges*, 12, U.N. Sales No. E.97.III.B.11 (1997)). This paper does not purport to discuss the right to adequate clothing, since too little has been expressed on the right, whereas issues of housing and food suffice to illustrate the point made for energy in this case.

195. ICESCR, *supra* note 50, art. 12; *see also* UDHR, *supra* note 185, art. 25.

196. CESCR, Substantive Issues Arising in the Implementation of the Int’l Cov. on Econ., Soc. & Cultural Rights: The Right to the Highest Attainable Standard of Health, ¶ 3, 22d Sess., Apr. 25–May 12, 2000, U.N. Doc. E/C.12/2000/4 (Aug. 11, 2000) [hereinafter General Comment No. 14].

sanitation.¹⁹⁷ The strong link between access to energy services and health is further demonstrated in the armed conflict context, where the destruction of energy generating facilities has led to widespread health risks and humanitarian disasters.¹⁹⁸

The Right to Water

Furthermore, the recently recognized human right to safe and clean drinking water further strengthens the case for the right to energy.¹⁹⁹ Although the right to water has gained more express recognition than that of energy,²⁰⁰ it is nevertheless the case that the “range of economic, social and cultural rights dependent upon access to modern energy services are ‘considerably broader than those that require water.’”²⁰¹ While access to water is considered to be “essential for the full enjoyment of life and all human rights”²⁰² and “at least as important as food,”²⁰³ the right to water is “itself dependent upon a right to access to energy services.”²⁰⁴ Indeed, access to safe and clean drinking water itself more than often requires water pumps, desalination, and sanitation treatment—all of which require energy to function.²⁰⁵ In other words, following the recognition of the right to water, the consideration of recognition of the right to energy as an independent human right should only be a matter of time, but not of principle.

197. See General Comment No. 14, *supra* note 196, ¶¶ 12(d), 14–17 (where the CESCR expanded on the specific aspects of the right under Article 12(2), for which the access to energy is undoubtedly required).

198. See *supra* *Energy as the Key to Survival in Armed Conflict*, p. 582; see also Elizabeth Gibbons & Richard Garfield, *The Impact of Economic Sanctions on Health and Human Rights in Haiti, 1991-1994*, 89 AM. J. PUB. HEALTH 1499, 1501 (1999).

199. See General Comment No. 15, *supra* note 182.

200. For example, water is considered to have gained “explicit and enthusiastic support amongst civil society groups and international organisations” amongst “an ever-growing list of states,” as it was addressed in more concluding observations between 1993 and 2006 than was energy. Riedel, *supra* note 173, at 19, 25.

201. Bradbrook & Gardam, *supra* note 6, at 409.

202. The Human Right to Water and Sanitation, G.A. Res. 64/292, at ¶ 1, U.N. Doc. A/RES/64.292 (Aug. 3, 2010).

203. Riedel, *supra* note 173, at 25.

204. Bradbrook & Gardam, *supra* note 6, at 409.

205. *Id.* at 409; see also WATER UNDER SIEGE IN IRAQ, *supra* note 17, at 4; U.N. Palestine Report, *supra* note 24, ¶ 1247.

*The Right to Development*²⁰⁶

Energy is equally essential to economic and social development,²⁰⁷ where development is a universal and inalienable right that facilitates the enjoyment of all human rights.²⁰⁸ It is the right to “participate in, contribute to and enjoy economic, social, cultural, and political development, in which all human rights and fundamental freedoms can be fully realized.”²⁰⁹ It is also seen as the right of all individuals to “maximize their potential, and to contribute to the evolution of society as a whole.”²¹⁰ Yet its realization depends on the access to energy. Indeed, the UN Secretary-General has spoken of energy as being “critical for human progress.”²¹¹ It has also been consistently acknowledged that without greater access to reliable and affordable energy services, none of the UN Millennium Development Goals (“MDGs”)²¹² can be achieved.²¹³

206. The fact that the CESCR deliberately avoided the “deep waters of the right to development” in adopting General Comment No. 15 on the right to water arguably does not diminish the link between energy and development, which is necessarily stronger and more relevant than that in the case of water. See Riedel, *supra* note 173, at 28.

207. Agenda 21, *supra* note 10, ¶¶ 7.1, 7.46, 7.51.

208. Vienna Declaration, *supra* note 182, ¶ 10.

209. Declaration on the Right to Development, G.A. Res. 41/128, art. 1(1), U.N. Doc. A/RES/41/128 (Dec. 4, 1986).

210. UNCHR, *Question of the Realization in All Countries of the Economic, Social, and Cultural Rights Contained in the Universal Declaration of Human Rights and in the International Covenant on Economic, Social, and Cultural Rights, and Study of Special Problems Which the Developing Countries Face in Their Efforts to Achieve These Human Rights*, para. 1, 54th Sess., U.N. Doc. E/CN.4/1998/NGO/4 (Jan. 16, 1998); see also Vienna Declaration, *supra* note 182, ¶ 11; Agenda 21, *supra* note 10. *But see, e.g.*, U.N. Conf. on Env't & Dev., Rio de Janeiro, Braz., June 3–14, 1992, *Action Taken by the Conference*, para. 16, U.N. Doc. A/Conf.151/26 (Vol. IV) (Aug. 12, 1992) [hereinafter Rio Declaration]; Steven Marks, *The Human Right to Development: between Rhetoric and Reality*, 17 HARV. HUM. RTS. J. 137, 143–50 (2004); FELIX KIRCHMEIER, THE RIGHT TO DEVELOPMENT—WHERE DO WE STAND? 3, 9–10, 13–15 (Friedrich, Ebert, Stiftung 2006).

211. Asha-Rose Migiro, Deputy Secretary-General, Secretary-General's remarks at UN Private Sector Forum on Sustainable Energy for All (Sept. 20, 2011), available at <http://www.un.org/sg/statements/index.asp?nid=5530> (delivered on behalf of the U.N. Secretary-General).

212. U.N. Millennium Declaration, G.A. Res. 55/2, U.N. Doc. A/RES/55/2 (Sept. 8, 2000).

213. Bradbrook & Gardam, *supra* note 6, at 397 (citing WEA 2004, *supra* note 9, at 18); Keeping the Promise: United to Achieve the Millennium Development Goals, G.A. Res. 1/65/L.1, para. 46, U.N. Doc. A/65/L.1 (Sept. 17, 2010) [hereinafter MDG Outcome Document]; see also *Matters Brought to the Attention of the Council*, Comm'n on Sustainable Dev., 9th Sess., May 5, 2000, Apr. 16–27, 2001, paras. 1, 4, U.N. Doc. E/CN.17/2001/19, Supp. No. 9 (2001); WSSD, *Plan of Implementation*, *supra* note 7, ¶ 8; Tully, *Universal Energy Access*, *supra* note 6, at 531 (citing U.N. Millennium Project, *Investing in Development: A Practical Plan to Achieve the Millennium Development*

One aspect of the right to development, sustainable development, also depends largely on the access to energy.²¹⁴ Defined by the UN as “development that meets the needs of the present without compromising the capability of future generations to meet their needs,”²¹⁵ sustainable development is “an important measure for the realisation of comprehensive and free development of people . . . through the best measures.”²¹⁶ It concerns all areas of human development, of which access to energy is considered one of the major components, alongside the fulfilment of basic needs and poverty eradication.²¹⁷ As an underlying condition for the latter two, access to energy is arguably the biggest key to realizing sustainable development and hence should be considered a right in itself.²¹⁸

Emerging International Recognition and State Practice

In light of the essential role of energy in the realization of the rights examined above, the right to energy is already integral to the existing human rights framework.²¹⁹ The growing international recognition of the link between access to energy and human development, as evidenced in the practice of states and the international community, makes the case for formal recognition of the right to energy even more compelling. For decades, human development and environmental protection have been wide-

Goals 140 (2005)). See generally KANDEH K. YMKELLA ET AL., UN-ENERGY: LOOKING TO THE FUTURE 8 (Apr. 2010), http://www.unido.org/fileadmin/user_media/News/2010/UN-Energy_Looking_to_the_Future.pdf.

214. See Xigen Wang, *On the Right to Sustainable Development: Foundation in Legal Philosophy and Legislative Proposal*, in IMPLEMENTING THE RIGHT TO DEVELOPMENT: THE ROLE OF INTERNATIONAL LAW 39, 45 (Stephen P. Marks ed., 2008).

215. See Brundtland Report, *supra* note 6; Wang, *supra* note 214, at 40.

216. Wang, *supra* note 214, at 45.

217. UNDP, ENERGY AS AN INSTRUMENT FOR SOCIO-ECONOMIC DEVELOPMENT (Thomas B. Johansson et al. eds., 1995); Tully, *Universal Energy Access*, *supra* note 6, at 518–48; see ESCOR, Comm’n on Sustainable Dev., Rep. on the Ninth Session, § II, ¶ 4, U.N. Doc. E/CN.17/2001/19 (2001).

218. See also Bradbrook & Gardam, *supra* note 6, at 409.

219. For example, it has also been argued that the right to energy is essential to the realization of multiple rights under the ICESCR including: the right to work (Art. 6), the right to safe and healthy working conditions (Art. 7) and the right to education (Art. 13), as well as the right to equality and non-discrimination (Arts. 2(2), 3), the discussion of which, due to space constraints, has to be left out of this paper. ICESCR, *supra* note 50; see Bradbrook & Gardam, *supra* note 6, at 406; Tully, *Universal Energy Access*, *supra* note 6, at 525; Tully, *Human Right to Access Electricity*, *supra* note 7.

ly discussed among states in the international arena.²²⁰ For example, the 1992 UN Conference on Environment and Development resulted in the extremely detailed Agenda 21,²²¹ Rio Declaration,²²² and Statement of Principles.²²³ The Energy Charter Treaty of 1994,²²⁴ the first international multilateral treaty concerned exclusively with energy services, seeks to promote energy efficiency and attempts to minimize the environmental impact of energy production and use at every stage of the energy chain.²²⁵

In 2000, one of the MDGs set by the United Nations was to ensure environmental sustainability.²²⁶ The *World Energy Assessment Report of 2000* and its *2004 Update*²²⁷ were considered “a major milestone in [the]

220. Bradbrook & Gardam, *supra* note 6, at 397–98; *see also* Brundtland Report, *supra* note 6, ch. 4; *see* Econ. & Soc. Comm'n for Asia & the Pacific, Gov't of the Rep. of Indon., Bali, Indon., Dec. 9–10, 2008, *High-level Regional Policy Dialogue on “The food-fuel crisis and climate change: Reshaping the Development Agenda”*, ¶¶ 19, 20, 23 (2008), available at <http://www.unescap.org/LDCCU/Meetings/HighLevel-RPD-food-fuel-crisis/BaliOutcomeDocument.pdf>; ENERGY 2010, <http://www.energyafricaexpo.com/index.php> (last visited Feb. 20, 2012); Council Directive 2003/54, art. 3(3), 2003 O.J. (L 176) 37, 43 (EC) (explaining there is a state obligation to “ensure that all household customers . . . enjoy universal service, that is, the right to be supplied with electricity of a specified quality within their territory at reasonable, easily and clearly comparable and transparent prices.”).

221. *See* Agenda 21, *supra* note 10, ¶¶ 7.1–7.8.

222. Rio Declaration, *supra* note 210, prins. 1–5.

223. U.N. Conf. on Env. & Dev., Rio de Janeiro, Braz., June 3–14, 1992, *Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests*, U.N. Doc. A/CONF.151/26 (Vol. III), Annex III (Aug. 14, 1992).

224. Energy Charter Secretariat, *The Energy Charter Treaty and Related Documents, Final Act of the Int'l Conf. and Dec. of the Energy Charter Conf. (1991)*, available at http://www.encharter.org/fileadmin/user_upload/document/EN.pdf [hereinafter *Energy Charter Treaty*]; *see also* Energy Charter Secretariat, *The Energy Charter Treaty and Related Documents, Concluding Doc. of the Hague Conf. on the Eur. Energy Charter (1991)*, available at http://www.encharter.org/fileadmin/user_upload/document/EN.pdf.

225. Clare Shine, *Environmental Protection Under the Energy Charter Treaty*, in *THE ENERGY CHARTER TREATY: AN EAST-WEST GATEWAY FOR INVESTMENT AND TRADE* 520, 544 (Thomas W. Wälde ed., 1996). Note particularly Article 19 of the Energy Charter Treaty for the numerous references to economically efficient and environmentally sound energy technologies and development of renewable energy sources. *Energy Charter Treaty*, *supra* note 224, art. 19(d), (g).

226. U.N. Millennium Declaration, *supra* note 212, para. IV; *see also* Agenda 21, *supra* note 10, prins. 1, 8, 9, 10, 12, 15; ¶¶ 5.3, 7.27, 7.28, 7.35, 7.39, 7.41, 18.3, 18.8, 18.35, 18.40, 18.48, 18.50, 18.59, 18.68.

227. WEA 2000, *supra* note 9; UNDP ET. AL., *WORLD ENERGY ASSESSMENT OVERVIEW: 2004 UPDATE*, U.N. Sales No. E.04.III.B.6 (Jose Goldemberg & Thomas B. Johansson eds., 2004).

effort . . . of the United Nations [and] the first time that energy issues were considered in their totality in the context of sustainable development.”²²⁸ Leading up to the 2002 World Summit on Sustainable Development (“WSSD”), which marked the tenth anniversary of the Rio Conference, energy was placed alongside water, health, agriculture, and biodiversity as one of the key areas “in which progress would offer all human beings a chance of achieving prosperity” beyond their own lifetime.²²⁹ In the WSSD that followed, the energy issue was substantially discussed. Against the background of the energy-poverty nexus and the role of energy access in food, water, health, income, and jobs, energy services were regarded as “an entry point to sustainable development,” and the importance of energy conservation, efficiency, and the need to develop clean and renewable energy sources to mitigate climate change were highlighted.²³⁰ More specifically, states have undertaken to develop “advanced, cleaner, more efficient, affordable and cost-effective energy technologies” and “substantially increase the global share of renewable energy sources with the objective of increasing its contribution to total energy supply,”²³¹ as well as to improve access to affordable, “cost-effective, safe and environmentally sound alternatives to ozone-depleting substances.”²³²

Most recently, equal access to energy has been specifically mentioned alongside health, education, water, and sanitation as one of the means to accelerate progress to achieve the MDG of ensuring environmental sustainability.²³³ In addition, references were made to the increased use of new and renewable energy sources, “sustainable use of traditional energy resources,” as well as the promotion of “access to modern, reliable, affordable and sustainable energy services” by way of national policies and international cooperation.²³⁴ For the upcoming Earth Summit 2012, the

228. See Kui-Nang Mak & Friedrich Soltau, *Policy Options*, in *THE LAW OF ENERGY FOR SUSTAINABLE DEVELOPMENT* 202, 206 (Adrian J. Bradbrook et al. eds., 2005).

229. Press Release, Secretary General, Both Rich and Poor Have Clear Interest in Protecting Environment, Promoting Sustainable Development, Secretary-General Says, U.N. Press Release SG/SM/8239 (May 14, 2002).

230. World Summit on Sustainable Development, Johannesburg, S. Afr., Aug. 26–Sept. 4, 2002, *Rep. of the World Summit on Sustainable Development*, ¶¶ 39–44, U.N. Doc. A/CONF.199/20 (2002).

231. WSSD, *Plan of Implementation*, *supra* note 7, ¶¶ 8, 19(e).

232. *Id.* ¶¶ 8, 37(d).

233. MDG Outcome Document, *supra* note 213, para. 77(k).

234. *Id.* para. 77(f).

global energy crisis has been highlighted as one of the more urgent problems up for discussion.²³⁵

While no international initiative can change the world overnight and few can be considered extremely effective,²³⁶ the continuous efforts of the international community in implementing strategic programmes in energy access, renewable energy, and energy efficiency ought to be acknowledged and appreciated.²³⁷ At the very least, these reflect the ongoing commitment of the international community to move the world toward universal access to energy services, poverty eradication, and sustainable development, all of which establish a framework for the right to energy as a human right. Further support for the right to energy can be found in the practice of individual states and certain Concluding Observations of the ICESCR. Taking South Africa as an example, the right to access electricity services was considered by its Constitutional Court to be included in the right to adequate housing,²³⁸ whereas the South African High Court found a *prima facie* right to demand electricity once the supply condition is satisfied.²³⁹ In its Concluding Observations, the CESCR urged Georgia to particularly ensure that the infrastructure for “energy provision and heating” is improved,²⁴⁰ and called on Australia to “take immediate steps to [implement] a human rights framework that ensures access to the social determinants of health such as . . . electricity.”²⁴¹ It has also expressed its deep concern towards the “continuing lower standard of living of Israeli Arabs as a result, inter alia, of . . . lack

235. *Addressing New and Emerging Challenges*, EARTH SUMMIT, <http://www.earthsummit2012.org/index.php/addressing-new-emerging-challenges> (last visited Jan. 25, 2012).

236. See, e.g., George Pring, *The 2002 Johannesburg World Summit on Sustainable Development: International Environment Law Collides With Reality, Turning Jo'Burg Into 'Joke'Burg'*, 30 DENV. J. INT'L L. & POL'Y 410, 420 (2002).

237. See U.N. Industrial Dev. Org. [UNIDO], *Delivering on Energy: An overview of activities by UN-Energy and its members* (2010), available at http://www.unido.org/fileadmin/user_media/News/2010/Delivering_on_Energy.PDF.

238. *Republic of South Africa v. Grootboom & Others* 2000 (11) BCLR 1169 (CC) para 37 (S. Afr.); S. AFR. CONST., 1996, ch. 2, §26; see also Jackie Dugard, *Power to the people? A rights-based Analysis of South Africa's electricity services*, in ELECTRIC CAPITALISM: RECOLONISING AFRICA ON THE POWER GRID 264, 266 (2009). Note that although it was an *obiter dictum* and South African has not ratified the ICESCR, that should not negate the judicial recognition of the importance of access to energy services.

239. See *Meyer v. Moqhaka Local Municipality* 2004 (4008/2003) [2004] ZAFSHC 122 (S. Afr.).

240. ESCOR, Concluding Observations of the Comm. on Econ., Soc. & Cultural Rights: Geor., ¶ 40, U.N. Doc. E/C.12/1/Add.83 (Dec. 19, 2002).

241. ESCOR, Concluding Observations of the Comm. on Econ., Soc. & Cultural Rights: Austl., ¶ 28 U.N. Doc. E/C.12/AUS/CO/4 (June 12, 2009).

of access to . . . electricity.”²⁴² In view of this growing legal basis, there appears little justification for not recognizing access to energy as a human right.

V. THE NORMATIVE CONTENT OF THE RIGHT TO ENERGY

General Definition

The human right to energy should be defined as a universal right of “access to the products and lifestyle changes that the availability of adequate modern energy services can provide.”²⁴³ Without proposing a detailed formulation of the right, it is suggested that at least three basic elements be present: availability, accessibility, and quality.²⁴⁴ Availability entails adequacy, regularity, continuity, and reliability. The supply of energy services must be able to meet the most pressing needs for human survival, such as cooking, lighting, refrigeration, and maintenance of essential medical services. Arbitrary disconnections from “the essential minimum quantity of electricity for reasons of financial inability” should be prohibited.²⁴⁵ Accessibility means that energy services must be provided on an equitable and nondiscriminatory basis.²⁴⁶ It presupposes both physical, economic, and information accessibility: the services must be accessible in proximity to the population, the costs must be affordable, and information concerning energy issues should be freely accessible by the general population.²⁴⁷ This is especially important in ensuring access for vulnerable and underprivileged groups, which are often doubly mar-

242. ESCOR, Concluding Observations of the Comm. on Econ., Soc. & Cultural Rights: Isr., ¶ 16, U.N. Doc.E/C.12/1/Add.90 (June 26, 2003).

243. Bradbrook & Gardam, *supra* note 6, at 392–93 (citing Klais Bosselman, *Ethical Implications of Energy for Sustainable Development*, in *THE LAW OF ENERGY*, *supra* note 228, ch. 5).

244. See, e.g., General Comment No. 15, *supra* note 182, ¶ 12; Bradbrook & Gardam, *supra* note 6, at 409; Tully, *Human Right to Access Electricity*, *supra* note 7, at 32.

245. Tully, *Human Right to Access Electricity*, *supra* note 7, at 33.

246. ICESCR, *supra* note 50, arts. 2(2), 3; CESCR, Rep. on the Tenth & Eleventh Sessions, May 2–20, 1994, Nov. 21–Dec. 9, 1994, Supp. No. 3, Annex IV, General Comment No. 5, ¶ 11, U.N. Doc. E/1995/22 (1995) [hereinafter General Comment No. 5]; CESCR, General Comment No. 16, The Equal Right of Men and Women to the Enjoyment of All Econ. Soc. & Cultural Rights, U.N. Doc. E/C.12/2005/4 (Aug. 12, 2005) [hereinafter General Comment No. 16]; CESCR, General Comment No. 20, Non-Discrimination in Econ. Soc. & Cultural Rights, U.N. E/C.12/GC/20 (July 2, 2009) [hereinafter General Comment No. 20].

247. For discussions on possible subsidies, see George R. G. Clarke & Scott Wallsten, *Universal Service: Empirical Evidence on the Provision of Infrastructure Services to the Rural and Poor Urban Consumers*, in *INFRASTRUCTURE FOR POOR PEOPLE: PUBLIC POLICY FOR PRIVATE PROVISION* 21–75 (Penelope Brook & Timothy Irwin eds., 2003).

ginalized by the lack of energy access.²⁴⁸ Quality generally refers to safety. The energy sources involved should not be harmful to human health or the environment and, ideally, clean and environmentally friendly.

*Specificity in the Context of Development*²⁴⁹

In light of the energy crises facing the world today, it is inevitable that that the right to energy should be tied to wider development goals.²⁵⁰ In other words, the manner of realizing the right to energy must also be sustainable, ensuring that the right can be realized for present and future generations.²⁵¹ This recognizes the pressing need to resolve the underlying incompatibility between expanding energy access by exploiting natural resources and the related environmental objectives.²⁵² Today, in the name of development, the continued increase in the unsustainable use of nonrenewable energy sources, such as coal, oil, and natural gas, by an expanding global population are generating environmental problems that will in turn undermine human development.²⁵³ Thus it is suggested that all energy sources used should, as far as practicable, be clean, renewable, and “used in ways that respect the atmosphere, human health and the environment as a whole.”²⁵⁴ This will ensure that energy, as a right, is not subject to limitations caused by unsustainable practices in the future.

248. Tully, *Universal Energy Access*, *supra* note 6, at 520; U.N. Conf. on Trade & Dev., Feb. 4–8, 2002, *Analysis of Ways to Enhance the Contribution of Specific Services Sectors to the Development Perspectives of Developing Countries: Energy Services in International Trade: Development Implications*, §1, ¶¶ 2, 3, 5 & § 2, ¶ 3, U.N. Doc. TD/B/COM.1/L.22 (Feb. 7, 2002).

249. It is noted that the CESCR was “not that bold” to raise the issue of environmental protection in its General Comment on the right to water, in view of “the breath of the environmental aspects” of water and the protection of water resources by the right to health, under the heading of “improvement of all aspects of environmental and industrial hygiene.” See General Comment No. 15, *supra* note 182; Riedel, *supra* note 173, at 28; ICESCR, *supra* note 50, art. 12(2)(b). However, it is argued that the right to health, given its nature and limited scope, will not be sufficient to cover the range of environmental issues associated with realization of universal energy access that go beyond human health, environmental, and industrial hygiene, such as the overexploitation of natural resources and its impact on the sustainability of energy sources and services.

250. ESCOR, Comm’n on Sci. & Tech. for Dev., *New and Emerging Technologies: Renewable Energy for Development: Rep. of the Secretary General*, ¶ 40, U.N. Doc. E/CN.16/2010/4 (Mar. 8, 2010).

251. Cf. General Comment No. 15, *supra* note 182, ¶ 11.

252. Tully, *Universal Energy Access*, *supra* note 6, at 545; see also Int’l Conf. for Renewable Energies, Bonn, Germ., June 1–4, 2004, *Political Declaration*, ¶ 1 (2004), available at http://www.renewables2004.de/pdf/conference_report.pdf.

253. Agenda 21, *supra* note 10, ch. 6.

254. *Id.* ¶ 9.9; see also Tully, *Clean Energy*, *supra* note 175, at 140–48.

VI. THE LEGAL OBLIGATIONS

Non-derogable Core Obligations and Progressive Realization

Before considering the human rights obligations pertaining to the right to energy, it should first be recalled that in international human rights law, the right to energy has been regarded as an implied right under the ICESCR. Hence, the general obligations under the ICESCR serve as a useful starting point to examine the relevant obligations flowing from the right to energy. First, it is argued that the non-derogable minimum core obligations in times of armed conflict, emergency, and natural disasters under the ICESCR²⁵⁵ should apply. Another feature is arguably non-derogable nature of the right since, unlike the ICCPR,²⁵⁶ the ICESCR contains no express provision for derogations.²⁵⁷ It only permits states to “subject such rights *only* to such limitations as are determined by law *only* in so far as this may be compatible with the nature of these rights and *solely* for the purpose of promoting the general welfare in a democratic society.”²⁵⁸ This is a very restrictive provision since jeopardizing the essential human needs for energy would not be compatible with the nature of the right nor would it promote “the general welfare in a democratic society.”²⁵⁹

Also applicable is the principle of progressive realization contained in the ICESCR, which requires all states parties to make every effort to “ensure the satisfaction of, at the very least, minimum essential levels” of the right to energy on a nondiscriminatory basis,²⁶⁰ while moving “as expeditiously and effectively as possible” towards its full realization by “all appropriate means.”²⁶¹ This principle acknowledges the possible re-

255. See CESCR Statement on Poverty, *supra* note 7, ¶¶ 16, 18; Vienna Declaration, *supra* note 182, ¶ 29. See generally Amrei Müller, *Limitations to and Derogations from Economic, Social and Cultural Rights*, 9 HUMAN RIGHTS L. REV. 557, 557–601 (2009). Cf. General Comment No. 15, *supra* note 182, ¶¶ 22, 37, 40; General Comment No. 14, *supra* note 196, ¶ 47.

256. ICCPR, *supra* note 49, art. 4.

257. See Wall Opinion, *supra* note 40, ¶¶ 106, 135 (where the ICJ considered that derogations should be justified by express provisions).

258. ICESCR, *supra* note 50, art. 4 (emphasis added); see also Wall Opinion, *supra* note 40, ¶ 136 (where the ICJ held that the construction of the wall by Israel fails to meet these conditions).

259. ICESCR, *supra* note 50, art. 4.

260. *Id.* arts. 2(2), 3; see also General Comment No. 20, *supra* note 246.

261. ICESCR, *supra* note 50, art. 2(1); see also CESCRS, General Comment No. 3: The Nature of States Parties Obligations, ¶¶ 9–10, U.N. Doc. E/1991/23 (Dec. 14, 1990) [hereinafter General Comment No. 3].

source constraints faced by states,²⁶² the time needed to incrementally expand the network of energy services provisioned to benefit the entire population,²⁶³ while also implicitly addressing the risks of destruction of energy infrastructures in armed conflict.²⁶⁴ It further obliges states to seek and provide international assistance and cooperation, in particular economic and technical, where necessary.²⁶⁵

It is therefore well settled that in all circumstances, states must take immediate, deliberate, and concrete steps, “to the maximum of its available resources,” to ensure that the energy services provided can meet the survival needs of the population or, at least, “the widest possible” part of it.²⁶⁶ Any inaction or retrogressive measures towards fully realizing the right can hardly be justified, save on truly exceptional grounds and supported by cogent evidence.²⁶⁷

Obligation to Respect, Protect, and Fulfill

More specifically, states are obliged to respect, protect, and fulfill the right to energy.²⁶⁸ To respect the right is to refrain from violating it. This entails the avoidance of actions that can deprive any right-holder of his or her equitable access to energy services, including measures to terminate the service provisions, embargos, and sanctions that have disproportionate impacts on the population’s access to such services.²⁶⁹ To protect is to take necessary measures to prevent violations by third parties, such as private energy providers and other non-state actors.²⁷⁰ It should be added that mere privatization of the energy services provision does not

262. General Comment No. 3, *supra* note 261, ¶ 10.

263. Tully, *Human Right to Access Electricity*, *supra* note 7, at 32.

264. Note that this is also entirely consistent with, for example, the obligation to ensure “the continuous improvement of living conditions” under Art 11(1), which forms one of the bases for the right to energy. ICESCR, *supra* note 50, art. 11(1).

265. Tully, *Human Right to Access*, *supra* note 7.

266. General Comment No. 3, *supra* note 261, ¶¶ 10–11.

267. *Id.* ¶ 9.

268. See generally Tully, *Universal Energy Access*, *supra* note 6. Cf. General Comment No. 15, *supra* note 182, ¶¶ 20–32.

269. See CESCR, The Relationship between Economic Sanctions and Respect for Econ., Soc., & Cultural Rights, CESCR General Comment 8, U.N. Doc. E/C.12/1997/8 (Dec. 12, 1997) [hereinafter General Comment No. 8] (on the relationship between human rights and economic sanctions).

270. See Tully, *Human Right to Access Electricity*, *supra* note 7, at 32; see, e.g., U.N. Comm. on Human Rights [UNCHR], Sub-Comm. on the Promotion & Prot. of Human Rights, Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights, 55th Sess., U.N. Doc. E/CN.4/Sub.2/2003/12/Rev.2 (Aug. 26, 2003).

absolve states parties from their human rights obligations.²⁷¹ The obligation to fulfill is the taking of targeted, positive actions on part of the parties to facilitate, promote, and provide access to energy services to all individual within their jurisdiction or control, including implementing appropriate laws and policies, where necessary, to achieve universal and equitable access, with specific measures to ensure the inclusion of vulnerable groups in society.²⁷²

This obligation should also entail the taking of necessary steps to promote, as suggested in a recent review of the MDG for environmental sustainability, the “increased use of new and renewable energy sources,”²⁷³ energy efficiency, increasing the “sustainable use of traditional energy resources,” “promoting access to modern, reliable, affordable and sustainable energy services,” as well as the transfer of affordable sustainable energy technologies by international cooperation.²⁷⁴ In short, it is the obligation to reduce the society’s dependency on fossil fuel²⁷⁵ and increase reliance on environmentally sound energy systems in order to ensure sustainable energy supply for sustainable human development.²⁷⁶

Of specific relevance to the realization of the right to energy access is the obligation to seek and provide international assistance and cooperation, where necessary, to advance local energy technologies.²⁷⁷ A majority of the world’s most deprived regions have limited means to benefit from the new, privileged energy technologies,²⁷⁸ even though, contrary to common perception, some of these technologies are potentially affordable²⁷⁹ and have high potential in some of the developing countries, such

271. Bradbrook & Gardam, *supra* note 6, at 411; Tully, *Human Right to Access Electricity*, *supra* note 7, at 34–35; Miloon Kothari, *Privatising human rights – the impact of globalisation on adequate housing, water and sanitation*, U.N. PUB. ADMINISTRATION NETWORK (Oct. 28, 2008), <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN010131.pdf>.

272. See Tully, *Human Right to Access Electricity*, *supra* note 7, at 32.

273. Examples of renewable energy are solar thermal, solar photovoltaic, wind, hydro, biomass, geothermal, ocean, animal, and human power. Agenda 21, *supra* note 10, at 123 (citing U.N. Gen. Assembly, Rep. of the U.N. Conf. on Env’t & Dev., June 3–14, 1992, U.N. Doc. A/CONF.151/PC/119 (Aug. 13, 1992)).

274. See MDG Outcome Document, *supra* note 213, para. 77(f); ICESCR, *supra* note 50, art. 2(1); Tully, *Universal Energy Access*, *supra* note 6, at 545; GEE21 Report, *supra* note 8, ¶ 12.

275. Tully, *Clean Energy*, *supra* note 175, at 144.

276. See Agenda 21, *supra* note 10, ¶ 9.9.

277. ICESCR, *supra* note 50, art. 2(1).

278. See, e.g., UNDP, *Human Development Report 2001: Making New Technologies Work for Human Development 3* (Oxford Univ. Press 2001).

279. See, e.g., Press Release, Rural Energy Found, EU Awards solar energy in Africa (Mar. 25, 2010), *available at*

as solar energy in Africa.²⁸⁰ Moreover, this obligation arguably coincides with the right to “enjoy the benefits of scientific progress and its applications,”²⁸¹ which requires steps to be taken for, *inter alia*, the “development and the diffusion of science”²⁸² and encourages international contacts and cooperation.²⁸³ In response to various claims that this right directly clashes with intellectual property rights, it has been specifically and eloquently argued that according to the proper interpretation of this right, intellectual property rights do not constitute a barrier to the deployment, diffusion, and transfer of new technological discoveries, such as low carbon and adaptation technologies.²⁸⁴ Therefore, it is posited that the obligation to develop energy technologies no longer rests upon each individual state within its own territory, but is spread across the international community as a whole, in a global effort to pursue universal energy services.

CONCLUSION AND RECOMMENDATIONS

To conclude, access to energy services is a universal human right of both the present and future generations, applicable both at peacetime and in armed conflict. An essential right for human development at peacetime, and a key to human survival in armed conflict, it is a right that ought to be formally recognized and protected for all individuals, at all times, in all places. First regarded as an implicit attribute of pre-existing human rights and obligations under international humanitarian law, the right to energy, in view of the emerging international recognition, now deserves its own status as a freestanding human right.

This paper calls for timely recognition of the right within the existing legal framework in order to ensure better protection. This can be accomplished by setting out detailed obligations, holding violators accountable, and providing appropriate remedies. This may take the form of a General

www.sustenergy.org/Userfiles/pdf/Commission_awards_Sustainable_Energy_Prizes.pdf; WEA 2000, *supra* note 9, at 369; Tully, *Universal Energy Access*, *supra* note 6, at 536.

280. See, e.g., *Renewable Sources of Energy in Africa*, RADIO NETH. WORLDWIDE (June 9, 2009), available at http://www.rnw.nl/africa/article/renewable-sources-energy-africa?quicktabs_1=2; see AFRICAN ACTION PLAN, *supra* note 4.

281. ICESCR, *supra* note 50, art. 15(1)(b); UDHR, *supra* note 185, art. 27.

282. ICESCR, *supra* note 50, art. 15(2).

283. *Id.* art. 15(3).

284. Lea Shaver, *The Right to Science and Culture*, 2010 WIS. L. REV. 121, 173 (2010); David Suzuki Found. et. al., *A Copenhagen Climate Treaty: A Proposal for a Copenhagen Agreement by Members of the NGO Community*, art. 8(6) (2009), available at http://assets.panda.org/downloads/final_treaty_legal_text_with_cover.pdf.

Comment to be issued by the CESCR,²⁸⁵ an express inclusion of the energy access in the current Reporting Guidelines,²⁸⁶ a set of specifically tailored voluntary guidelines,²⁸⁷ or a multilateral treaty.²⁸⁸ After all, merely calling something a human right will not achieve much.²⁸⁹ Placing energy in a human rights framework is only the beginning—a prelude to finding the right solution to sustainable human development amidst the global energy crises today and the impacts of armed conflict on the human life. “What matters in the end is that human rights are effectively realized and that is a political and legal issue at the same time.”²⁹⁰

This Article represents a preliminary attempt to address and explore some of the issues involved in this relatively new area of energy and human rights. Now it would be incumbent upon the international community to keep the energy question alive by developing it further in the mainstream agenda.²⁹¹ Questions remain as to how to realize this right in a sustainable development context without compromising other human rights²⁹² and how to best protect the right in armed conflict in light of military necessity under international humanitarian law. Lastly, when advocating for the new right to energy, one should always keep in mind what the right truly involves, at whose cost, at whose gain, and most importantly, the underlying reasons why it deserves universal respect and protection. Many issues raised in this paper invite further research,

285. Tully, *Universal Energy Access*, *supra* note 6, at 547. Although some may be concerned that there may not be sufficient state practice, a General Comment is still arguably the most direct way to include the right in the existing human rights framework.

286. See, e.g., ESCOR, *Guidelines on Treaty-Specific Documents to be submitted by States Parties under Arts. 16 & 17 of the Int'l Covenant on Econ., Soc. & Cultural Rts.*, E/C.12/2008/2 (Mar. 24, 2009).

287. See, e.g., U.N. Food & Agric. Org., *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security*, 127th Sess., Nov. 22–27, 2004 (2004), available at http://www.fao.org/righttofood/en/highlight_51596en.html.

288. A multilateral treaty is considered more flexible, as it is subject to changes in political circumstances and the national democratic processes. See Riedel, *supra* note 173, at 34. By contrast, to propose a human rights treaty in the near future would be impractical, due to the “‘continued unwillingness of states to submit to new control mechanisms’ and new issues, and the risk of ‘impression that after successful conclusion of such limited treaties, no more is needed to be done.’” One can find an analogous case in the right to water. See *id.* at 33–35.

289. See Tully, *Human Right to Access Electricity*, *supra* note 7, at 38; Bradbrook & Gardam, *supra* note 6, at 414.

290. Riedel, *supra* note 173, at 36.

291. Compare with the case for the right to water in Riedel, *supra* note 173, at 33–35.

292. Bradbrook & Gardam, *supra* note 6, at 414.

recognition, and reflections, all of which ought to be considered with the universality of human rights and the reverence for humanity in mind. Only then can this human right go beyond the narcissist's rhetoric²⁹³ to offer real protection for human life and dignity, wherever and whenever.

293. See, for example, Upendra Baxi, *Too Many, or Too Few, Human Rights?*, 1 HUM. RTS. L. REV. 1 (2001) for a critical discussion on the "overproduction of human rights."