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# Is there a universal human right to electricity?

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## ABSTRACT

This article considers three answers to the question whether electricity access should be a universal human right. A first position is that there is no human right to electricity but perhaps contractual rights related to various societies. A second position is that electricity is a derived human right, a right based on other rights, grounded on rights such as the right to adequate housing. A third position is that there is a universal human right to electricity. It is argued that the second position is the strongest since it supports the idea that humans often need access to electricity but avoids the stronger claim that all humans must have this access. The latter claim faces the challenge that rights language should focus on the needs of humans and not be extended too far to include everything that could be beneficial for humans. Such an extension might diminish the attention on the actual aim of human rights: That all humans should have a good enough life.

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## 1. Introduction

Electricity is an essential part of a high material living standard. Compared to direct sources of energy such as wood or natural gas, electricity is an energy carrier whose main benefit is its multitude of uses. Whether it is generated by burning fossil fuels or from wind turbines, electricity powers everything from light bulbs to computers and is the foundation for the delivery of services such as medical operations. Access to electricity has an impact on individuals' abilities to get an education, to communicate and to prepare food without air pollution.<sup>1</sup> Access to electricity is therefore a key resource for improving our lives and meeting our needs. It is reasonable to find ways to protect and promote such access.<sup>2</sup>

Human rights language provides one avenue for protecting and promoting access to electricity. Although there are few publications on human rights and electricity, there are several researchers who discuss this issue explicitly. They defend the claim that access to energy in general or to electricity in particular can be rights. Adrian Bradbrook and Judith Gardam are concerned with all kinds of energy including electricity. The fundamental issue is access to 'energy services' for enhancing human needs. Both Stephen Tully and Olasupo Owoeye discuss energy in general, but they place special emphasis on electricity as a key source of energy.<sup>3</sup> Jenny Sin-hang Ngai analyses the right to

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energy in the context of armed conflicts. She noticed the tension between access to energy and sustainable development. Her proposal is that a right to energy must, as far as practically possible, be a right to renewable energy. Marc Clemson and Allison Silverman provide a similar analysis of the international human rights paradigm and its implication for the environment and conclude that there are moral grounds for understanding energy access as a right, but there is no legal right for energy access.<sup>4</sup> Silverman also links the issue of a right to energy access to the discourse about energy justice. This discourse places rights in the context of justice, but justice includes a broader variety of issues, e.g. production, distribution and consumption of energy of both contemporaries and future generations.<sup>5</sup> Other relevant work is a case study about energy access in Mexico by Manuel Salvador Acuña Zepeda and Jesús Emanuel Díaz Zepeda. They analyse if and how a right to energy access is enshrined in the Mexican constitution. The finding is that the constitution does not treat energy access as a right but as a national interest.<sup>6</sup>

These researchers share some traits. Their research analyses energy access according to the human rights paradigm of the United Nations (UN). A main subject is the legal and policy issues of a right, but they also raise philosophical questions about energy equity and the relation between energy rights and sustainable development. They all notice a gap between international human rights declarations and conventions and the widespread human need for energy. It is noteworthy that their primary focus is energy in general and not electricity in particular. Although there is a link to the discourse about energy justice in the work of Silverman and others, there is an identified research need to systematically analyse the issue of a right to electricity with the help of different normative ethical theories, with specific focus on what kind of right this might be. Thus, this article aims to provide an explicit normative ethical dimension to the analysis of electricity access as a human right. The main two questions for this paper are therefore: First, can access to electricity be conceived as a right? Second, what kind of rights conception is most appropriate for such a right?

From an ethical perspective, it is reasonable to identify the arguments for claiming that electricity access can be conceived as a right and what kind of right it is supposed to be.<sup>7</sup> Normative ethical theory can provide additional analytic and terminological clarity for how a right to electricity access can be understood and identify some of the challenges facing this understanding.<sup>8</sup> Normative ethical theories provide a critical point of departure to analyse the plausibility of treating access to electricity as a right independently of the contemporary political and legal status of such a right.

I will use normative ethical frameworks developed by Henry Shue, Martha Nussbaum, Jack Donnelly and John Rawls in conducting an ethical analysis of electricity access as a moral right.<sup>9</sup> All four of these authors have provided detailed articulations of both the definitions of human rights but also substantial insights on the content of these rights. They are discussion partners that I will use to flesh out the meaning of a right to electricity. There are numerous definitions of a moral right, but as a starting point, I will define a moral right as a justified claim that a person can have to receive protection or help from some other party.<sup>10</sup> All four authors have had considerable impact on the human rights discourse. It is of particular interest that they have all written about the relation between the ethics of human rights and development.

Development too has numerous definitions but includes the idea of improving a society. Improvement can include many dimensions including cultural, moral and

material changes. Gilbert Rist argues that there is no established definition of development and the term, and its use is vague.<sup>11</sup> Development ethicist Des Gasper notes that there is a range of definitions of development. From definitions that are descriptive and ‘neutral’ to those that are more or less evaluative.<sup>12</sup> For the purpose of this article, I will assume a working definition of development as: A process of improving all conditions necessary for an individual to lead a good enough life. A good enough life includes several dimensions besides material conditions, such as human dignity and self-respect, an issue we will get back to later in text.

Electricity use is primarily considered to be a part of improved material conditions, and development includes more use of electricity. Shue, Donnelly, Nussbaum and Rawls all consider the function of material conditions for human life in general. They all analyse what is needed to live a good enough life, where basic material conditions are safeguarded.<sup>13</sup> They provide philosophical tools that facilitate a better understanding of the role of electricity access in human life and how this can be related to the concept of rights.

The article includes two delimitations. First, rights language has an individualistic preference, where the individual is the point of departure for the rest of the analysis. If access to electricity is a right, it is a right held by individuals. This article will assume that this individualistic preference is justified. Discussions on group rights will be left aside.<sup>14</sup> Second, the analysis will focus on the ethical dimensions of electricity and rights. Legal and policy related material are considered when they have direct bearing on the ethical analysis.

The article contains six more sections. The second section considers if it is reasonable to conceptualise electricity access as a right at all. The third section analyses how electricity access can be conceived as a contractual right. The fourth section analyses how a right to electricity can be conceived as a derivative right, a right derived from other rights. The fifth section analyses how electricity access can be conceived as a universal human right. The sixth section sums up the main discussion points of the article. Finally, section seven offers some conclusions.

## 2. Can electricity be conceived as a right?

No declaration or resolution explicitly claims that access to electricity is a universal human right.<sup>15</sup> The only international agreement that explicitly mentions electricity is the *Convention on the Elimination of All Forms of Discrimination against Women* (CEDAW). The convention specifies that women should have adequate living conditions, including access to electricity and water.<sup>16</sup> However, this convention refers to women in particular and still does not provide support for claiming that access to electricity is a right for every human being, the core idea of universal human rights. From a legal perspective, it seems that the right to access to electricity is still in its infancy. On the other hand, the CEDAW also confirms that it is possible to talk about access to electricity as a legal right. Is such terminology reasonable also from an ethical perspective? To answer this question requires a more detailed analysis of what a right is supposed to be, both its formal and substantial content.

One elaboration of a right’s formal content is provided by Henry Shue, which serves as the philosophical point of departure for my analysis. Shue claims that a moral right has the following formal structure: ‘A moral right provides (1) the rational basis for a justified

demand (2) that the fundamental enjoyment of a substance be (3) socially guaranteed against standard threats'.<sup>17</sup> This definition can cover all kinds of substances. An ability to vote in a political election or to have a fair trial can be seen as rights since they are often under threat. Similarly, a right to a resource can thus be understood as a legitimate claim to something that is under threat.

Besides the definition of a moral right, Shue also considered the substantial content of the right to subsistence.<sup>18</sup> It is relevant to consider this right in closer detail since subsistence focuses on the material conditions for human life. Arguably, electricity could be considered as a subsistence right in itself, but the current point is to flesh out how one can conceptualise a right to material conditions, whether it is conceived as subsistence or not. Shue sees subsistence as an example of basic rights: 'Basic rights, then, are everyone's minimum reasonable demands upon the rest of humanity ... They are the rational basis for justified demands the denial of which no self-respecting person can reasonably be expected to accept'.<sup>19</sup> Basic rights are rights that other rights are dependent upon, and they can therefore not be sacrificed for other things.<sup>20</sup> Shue argues that the right to subsistence includes the following: unpolluted air, unpolluted water, adequate food, adequate clothing, adequate shelter and a minimum of preventive health care.<sup>21</sup>

Electricity is not explicitly included in Shue's list. One reason for this is the apparent close link between subsistence and basic biological needs for human survival. An example of such reasoning can be found in the discussion about the right to water.<sup>22</sup> It is not obvious that electricity should be understood as a basic right similar to a right to water. Electricity can be sacrificed in order to achieve other things. One can live in a house without electricity, but one cannot live without water.

However, a focus on biological needs is too restricted. Such widely accepted rights as the right to free speech are obviously not about biological needs but are related to ideas about appropriate government. One can therefore argue that electricity is a right to a resource, which makes it easier to live a good enough human life even though it might not be necessary for survival. Moreover, Shue himself claims that the main critique facing the right to subsistence does not concern whether it can be a right or not. The critique is aimed at the practical challenges of realising this right.<sup>23</sup> It is therefore not unreasonable to conceive of electricity as a right.

After arguing that access to electricity can be understood as a right, the next step is to consider what kind of right it is supposed to be. I will discuss three possible answers to this question. The first answer is that access to electricity is a contractual right, discussed in section three. The second answer is that access to electricity is a derived right that is dependent on how we interpret other more basic human rights in specific contexts, discussed in section four. The third answer is that access to electricity is a universal human right, i.e. it should be available to all humans, discussed in section five.

### **3. Access to electricity as a contractual right**

A contractual right is a right that is dependent on a specific relation between human beings. The most important examples are rights you have as a part of a community, especially as a citizen. The idea is that an individual can only have a justified claim for access to electricity in a community if the community acknowledges such a right. One

example of such rights is the minimum standards for material conditions provided by the welfare state.<sup>24</sup>

An ethical justification for contractual rights can be found in contractual ethics. John Rawls, for example, defended a modern version of contractual ethics. The common idea in this tradition is that rules guiding a society should be based on an agreement between the members.<sup>25</sup> Parties in the contractual situation, the original position, lack knowledge of their actual situation. Rawls calls this lack of knowledge the veil of ignorance, and it ensures fairness in the decision procedure.<sup>26</sup> Rawls claims that parties in the original contract's position would agree to a broad set of primary goods that each contract participant, the contracting parties, should have access to and this includes rights.<sup>27</sup> Primary goods are 'things that every rational man is presumed to want. These goods normally have a use whatever a person's rational plan of life'.<sup>28</sup> Primary goods are thus essential for anyone to live a good enough life.

One central assumption is that outside parties do not have access to these rights since they are not recognised as full contractual participants. Thus, actors suffering from deprivation of general needs or frustrated interests do not figure directly in the contract. The contracting parties can, however, agree to principles of solidarity with non-participants, but the latter are dependent on the good will of the participants. Rawls does not mention electricity, or energy, explicitly, but it is possible that the contracting parties can agree that they need energy access and include it in the list of primary goods. Electricity has a wide variety of uses; therefore, it is probable that each member of the contracting parties will be able to use this energy carrier to forward his or her plan of life. An argument against this interpretation is that Rawls adds that primary goods are necessary means to reach ends, whatever that may be.<sup>29</sup> Electricity is not necessary but simply very useful. Rawls, however, also related primary goods to people's expectations.<sup>30</sup> People have expectations of certain goods as part of a group even if the exact distribution between the members might vary. Here, it is plausible to say that many citizens have an expectation to gain access to electricity, especially if other citizens have this access.

A particular interpretation of a contractual right, an interpretation that Rawls would reject, claims that citizens have the right to buy their supply of electricity on the open market. The right to access is conditioned upon such factors as the ability to pay. An argument for a market approach is that electricity can be treated just like any another commodity and be exposed to the same supply and demand factors. This will introduce higher efficiency in the use of electricity and expose consumers to higher prices in high demand situations.<sup>31</sup> If the barriers to enter this market are low, for example, with no state monopoly for electricity generation, there is also the possibility for faster response from electricity producers, which can offset higher prices.<sup>32</sup> The right to electricity access is effectively reduced to a question about consumer rights. Only a consumer that fulfils his or her obligations has a right to electricity.

This market access conceptualisation of rights is inadequate. As Shue points out, a right to something is not a right to have a right to something.<sup>33</sup> A right is about accessing something concrete such as food. A market based approach fails to grasp that it is not a right to access a market that matters, it is the enjoyment of what the market can provide that is the object of the right. This confutation does not reduce the force of the claim that access to electricity can be conceived as a contractual right.

More significantly, a contractual conception of access to electricity as a right does not consider national or global inequality. This conception of rights cannot easily explain why it is reasonable that more humans should have access to electricity. They are either not part of the contracting parties or lack funds for buying electricity on the market, if there is one.<sup>34</sup> A significant part of the global population, at least 1.2 billion people, lack access to electricity; further, another large group has random and unstable access.<sup>35</sup> Another key point is that many states can claim that their citizens have access to electricity, but this can in practice be an unsecure and unstable access. The more pertinent issue therefore is to consider to what degree is it reasonable that every human should have access to electricity independent of the specific community they live in. This issue will be considered in the next two sections.

#### 4. Access to electricity as a derived right

A derived, or derivative, right is a right based on other rights.<sup>36</sup> Derived rights are necessary for protecting or satisfying what Shue calls basic rights. A basic right is directly related to protection or promotion of a human need such as life or housing.<sup>37</sup> A derived right could be illustrated with the following example. Humans have rights to sufficient living conditions, and electricity can help to improve such conditions. This is the position of Stephen Tully who claims:

Electricity access is already well established within the framework of human rights, either as an implicit attribute of a pre-existing right (non-discrimination, adequate living standards, housing, health, and sustainable development) or explicitly in the context of eliminating discrimination against women.<sup>38</sup>

Tully claims that electricity becomes a right because of such rights as the right to housing.<sup>39</sup> The benefits of this position is that access to electricity can be adequately protected in a society that conceives that good housing is a human right and that housing includes access to electricity. Owoeye makes a similar point. He presents an overview of UN proceedings and activities that make direct references to energy issues. He especially notes the outcome document of the UN Conference Rio + 20, a document that was also adopted by the UN as a General Assembly Resolution. Owoeye comments on the outcome document's provision found in paragraph 125 and notes: 'This provision clearly accentuates the significance of energy access to the right to life, the right to health, the right to social security, the right to the highest attainable standard of living and the right to development'.<sup>40</sup> It is again noteworthy that the focus is on the derived importance of energy.<sup>41</sup>

The first problem with this position is that it leaves a key dimension open. Obviously, it is not true that housing must include access to electricity. We can live a reasonably good life without access to electric lighting and air conditioning. It is at least difficult to claim that electricity is a necessary part of a good enough life. This leaves the question open to define basic rights in a way that does not include electricity. What is important is that electricity access is included in a modern conception of a good life, which is closely connected to improved material conditions. The development discourse in general and the discourse about the right to development in particular emphasises the importance of material conditions for a good enough life.<sup>42</sup>

Derived rights depend on contextual and contingent factors that can be considered unfair. Why should people in country X not have the right to a similar standard of living as those who live in country Y? A response to this critique is that the context must be part of how human rights should be interpreted in a global perspective. Jack Donnelly stresses that from the conclusion that there is a right to something, there is a long step to interpret and apply this right. He claims that there is a strong global consensus on the concept of human rights but clear disagreements on how these concepts should be interpreted as well as how they should be implemented in concrete contexts.<sup>43</sup> The right to work, for example, can be interpreted in several different ways. Should it mean that individuals are guaranteed a job or is it enough with unemployment compensation? A number of interpretations of this right can be equally reasonable.<sup>44</sup>

The second problem is the global implications of this contextualisation. Should all humans have access to electricity? One way to answer this question is provided by Martha Nussbaum. She defends an ethical perspective known as the Capabilities approach. A primary concern of this approach is how people can live their lives, to identify the opportunities or freedoms of each person.<sup>45</sup> Nussbaum argues that each human being should be able to live a life of dignity, a life that everybody would consider a minimally decent human life.<sup>46</sup> What I have referred to as ‘a good enough life’. She defines and defends a list with 10 capabilities, possible ways of living, which each person should be able to have in order to live a decent human life. Nussbaum’s list includes, for example, that each person should have bodily integrity and ability to move around freely; that each person should be able to use their practical reason to plan their life; and that each person should have time for play and recreation. The list includes substantial ideas about what should be part of every life and goes far beyond material conditions.<sup>47</sup> The Capabilities approach is closely related to human rights with its focus on every human’s justifiable claims.<sup>48</sup>

In relation to Nussbaum’s capabilities list, it is clear that electricity is a very practical way to assist people in developing their practical reason and to give them time for play. Most humans need to spend much of their time in different types of work-related activities. The time for reading and relaxing is often the evenings. It becomes significantly more difficult to engage in these activities when one lacks access to electricity. An essential issue from Nussbaum’s perspective is that electricity provides options to live in other ways, and her list provides a clearly articulated normative proposal on what this should mean in practice. This suggests there is a reason to provide every human with electricity to facilitate more options. On the other hand, Nussbaum’s position is open to the fact that this is an empirical question. If there are other ways to strengthen capabilities than providing electricity, these might also be worth pursuing.

## 5. Access to electricity as a universal human right

The difference between a derived human right and a universal human right concerns the scope of a right. Both rights presume that electricity has no inherent importance and that its purpose is to protect values that are more fundamental, for example, biological needs. This section will analyse to which extent it is reasonable to treat access to the electricity itself as a universal human right, a right that is only dependent on being part of the species *Homo sapiens*.<sup>49</sup>

Shue argues that basic rights have a universal scope. As noted before, a key part for Shue is that basic rights include a demand towards the rest of the humanity to be treated in a way that is consistent with self-respect.<sup>50</sup> Jack Donnelly provides a similar theory about rights, but he explicitly uses human rights terminology. Human rights are: ‘... (a) a minimum set of goods, services, opportunities and protection that are widely recognized today as essential prerequisites for a life of dignity, and (b) a particular set of practices to realize these goods, services, opportunities, and protection’.<sup>51</sup> For Donnelly and for Shue, part of a right is what it does for humans; if it protects or facilitates a minimum level of self-respect or dignity. These ideas are related to electricity in the sense that in some societies, such as members of the Organization for Economic Co-operation and Development (OECD), one cannot easily function as a citizen without access to electricity.

Rawls too claims that self-respect is an important part of his list of primary goods in addition to rights, liberties, income, wealth, powers and opportunities.<sup>52</sup> The parties in the original position will agree to the idea that whatever kind of life they want to lead, they need to be able to have confidence in their life plans and abilities to realise them. This also includes confirmation from others who share these projects and an ability to avoid conditions that might undermine individual’s confidence in realisation.<sup>53</sup> One needs to have confidence to carry out life plans. Access to electricity provides support for this since it, for example, enhances the chances of obtaining an education that will affect one’s whole life. This reasoning suggests that it is sensible to consider access to electricity as a universal human right that is of importance for every person.

However, there are also problems with understanding access to electricity as a universal human right. The first problem is related to the factual challenges with treating electricity as a right. The second problem relates to the extension of rights language to electricity access itself.

The first problem facing this specific conception of the right to electricity access is practical and based on empirical factors. According to the International Energy Agency (IEA), fossil fuels such as coal, oil and natural gas provided 66.7% of the total electricity production in 2014.<sup>54</sup> The International Panel on Climate Change (IPCC) has produced ample evidence that anthropogenic climate change is dependent on fossil fuel combustion and associated Carbon dioxide (CO<sub>2</sub>) emissions.<sup>55</sup> Any discussion about electricity must therefore be conscious of the close relationship between fossil fuels and electricity production.

Besides fossil fuel based and CO<sub>2</sub> intense production systems, there are nuclear power and renewable energy. Nuclear power produced 10.6% of all electricity in 2014. The main type of renewable energy is hydropower, which constituted 16.4% of the total electricity generation that year. Other renewable energy sources such as geothermal, wind and solar produced 6.3% in 2014.<sup>56</sup> The upshot is that many humans are highly dependent on fossil fuel for their electricity supply, and a reason for this is that it can be relatively inexpensive, especially in cases where there is an existing infrastructure already adapted to such fuels. Total costs would most likely increase significantly if all environmental costs were included. Nevertheless, the production systems themselves do not include such costs. Key treaties like the *Paris Agreement* from 2015 also state that relatively poor countries should be allowed to continue to increase their greenhouse gas emissions in order to eradicate poverty.<sup>57</sup>

If all humans have a right to electricity and this implies that each state has an obligation to satisfy this right, there is a risk that states still perceive fossil fuel powered production systems as the most attractive for improving electricity access. This is a case where human rights might be in conflict with sustainable development.<sup>58</sup> If sustainable development implies that there has to be a transition from fossil powered electricity generation to renewable generation, many poor states will face extra burdens in the form of lack of know-how and additional costs to promote this right. This is an unfairness that seems incompatible with an egalitarian idea of energy justice.<sup>59</sup>

The second problem regards the use of rights language and electricity. For example, Bradbrook and Gardam stress that it is the 'energy services' provided by different resources that are important and not the type of energy.<sup>60</sup> They additionally claim that energy underpins all rights, including the right to water and that energy therefore should have a clearer recognition in international human rights policy and law.<sup>61</sup> The argument that access is important and not the actual resource can be both extended and challenged with the help of Nussbaum's writing.

From Nussbaum's perspective, electricity is still a means to an end. Nussbaum does not provide a list of material resources that should be considered to be rights. In fact, she argues against such lists. She criticises John Rawls' list of primary goods as inherently limited. Individuals are different in their capacity for converting resources into different ways of living their lives. Some individuals, such as those who have different disabilities or children might need substantially more resources to live a life of dignity. Thus, providing electricity will not help somebody if they are more in need of a personal assistant. Focusing on only access to electricity can hide other inequalities that might be much more important.<sup>62</sup>

Based on Nussbaum's analysis, the most essential challenge in claiming that access to electricity is a universal human right is that it risks extending human right language too far. One can argue that the idea that access to certain resources, such as electricity, should be conceived as human rights can diminish our focus on the main point with rights. Universal human rights should focus on securing a minimum level of what is of universal importance for humans, such as good health or similar needs. Electricity is not always the most useful way of solving our needs. Other alternatives might be more appropriate, especially in rural areas.

For example, there is evidence that fuels such as liquefied petroleum gas (LPG) is both cheaper and thermodynamically more efficient in providing energy for cooking compared to electricity.<sup>63</sup> The IEA points out that LPG and similar fuels might be the most realistic alternative to biomass for cooking when there is a lack of electricity related infrastructure.<sup>64</sup> It is also noteworthy that IEA claims that universal access to electricity would cost around 1.1 trillion USD until 2040, but the investment for reaching universal access to cleaner cooking facilities would cost just around 5% of this sum.<sup>65</sup> Aiming for access to cleaner cooking facilities can therefore be a more efficient and realistic use of funds. The long-term goal of universal energy access might eventually be reached through global electrification; however, in the meantime, there are arguments for using other sources of energy too as complements.

The next section will sum up the main points of the analysis so far and identify where this leaves us on the issue of a right to electricity access.

## 6. Discussion

Electricity provides numerous benefits to human beings. The arguments presented in the analysis do not challenge this claim. It has been argued that it is possible and reasonable to consider electricity access as a right. It is also not surprising that states consider electrification and access to electricity a core need of its citizens. The argument for considering this as a contractual right is well supported by the actions and understanding of how states promote electricity. An aspect that contractual rights miss is that some states are unable to provide electricity to its citizens. Another issue is that non-citizens' need for electricity is negotiable. Non-citizens cannot make binding claims on a state to provide electricity if access to electricity is conditioned on citizens' status. This makes the contractual understanding of electricity as a right too restricted. This conception does not capture the unique influence electricity has for us to lead our lives.

Derived rights provide a stronger argument that even non-citizens should have access to electricity. The core human right documents claim that access to a certain material standard, such as housing, is a human right. Nussbaum's reasoning on capabilities provides a philosophical argument for using electricity to strengthen people's abilities to lead their own life. This is a powerful argument to consider access to electricity at least as a right derived from other rights. Nevertheless, this position also acknowledges that access to electricity will be dependent on local contexts and that it is not reasonable to claim that all humans have a right to electricity access.

Finally, it was noted that our need for social recognition and ability to lead our life is supported by electricity. If electricity access is so important, it is relevant to consider if it can be a universal human right. This claim that electricity is a universal human right faces two important problems. The first is that it is practically challenging to provide electricity to every human being. Since electricity generation is still dominated by fossil fuels, there is a risk that the right to electricity clashes with the goal of sustainable development. It was noted as problematic to extend human rights language to include electricity access itself when there might be far cheaper and faster ways to satisfy humans' energy needs. The second argument against considering access to electricity as a right is that it extends rights language to include different means for supporting humans to live good enough lives. Such an extension is unnecessary in this case. To put it bluntly, a right to health might sometimes be best served with an X-ray machine, but it is not necessary to extend rights language to include this machine. In many instances, a right to health is best supported with vaccinations and access to high quality food. Human's rights to electricity access should be understood in the same way. It is enough to claim that basic rights and peoples abilities to lead good enough lives are often best protected and promoted with X-ray machines and electricity.

## 7. Conclusions

This article considered two questions: First, can access to electricity be conceived as a right? Second, what kind of rights conception is most appropriate for such a right? I have argued that the case for access to electricity as a right begins with considering rights to other resources, such as water. It is reasonable to conceive electricity access as some kind of right since this is consistent with current terminology.

Considering the second question, I have argued that electricity should not be understood as a contractual right of certain citizens nor understood as a universal human right. Understanding electricity as a right for citizens does not seriously take into account the needs of non-citizens. It is clear that electricity is a very efficient way to forward human wellbeing, whatever the geographical location of those humans. This provides a strong normative reason to support the spread of electrification. Understanding electricity as a universal human right claims that all humans have a right to electricity. This is problematic since a right to electricity might clash with environmental sustainability. In addition, this understanding treats electricity as universally important for humans, which is surely not the case. Humans have many needs and electricity can often but not always support these needs. Needs are ends and electricity is just a means to these ends.

We should therefore understand electricity as a derived right. A right to electricity is often necessary to protect our basic rights, for example, to life and to such material things as adequate housing, healthcare and education. Still, it is life, housing, health care and education that are essential, not electricity. This distinction is important since the pursuit of basic human rights is a worthy goal. This pursuit should not wait for total electrification of all parts of the world if there are other energy forms available today.

## Notes

1. For example, Olasupo Owoeye's, 'Access to Energy in Sub-Saharan Africa: A Human Rights Approach to the Climate Change Benefits of Energy Access' *Environmental Law Review* 284 (2016), 285, 289.
2. There is a close correlation between increased electricity consumption and growth in Gross Domestic Product, which in one way to illustrate improved material conditions. According to Shuwen Niu and others, 'Electricity Consumption and Human Development Level: A Comparative Analysis Based on Panel Data for 50 Countries', *Electrical Power and Energy Systems* 338 (2013): 340, there is a causal relation between electricity consumption and a state's level of development.
3. Adrian J Bradbrook and Judith G Gardam, 'Placing the Access to Energy Services Within a Human Rights Framework', *Human Rights Quarterly* 389 (2006): 392f. Stephen Tully, 'The Contribution of Human Rights to Universal Energy Access', *Northwestern Journal of International Rights* 518 (2006b). Owoeye (n 1).
4. Jenny Sin-hang Ngai, 'Energy as a Human Right in Armed Conflict: A question of Universal Need, Survival, and Human Dignity', *Brooklyn Journal of International Law* 37, no. 2 (2012): 579–622. Marc Clemson, 'Human Rights and the Environment: Access to Energy', *New Zealand Journal of Environmental Law* 16, (2012): 39–81. Allison Silverman, 'Energy Justice: The Intersection of Human Rights and Climate Justice', in *Routledge Handbook of Human Rights and Climate Governance*, eds. Sébastien Duyck, Sébastien Jodoin and Alyssa Johl (London: Routledge, 2018). 251–8.
5. See for example, Benjamin K Sovacool and Michael H. Dworkin, *Global Energy Justice: Problems, Principles and Practices* (Cambridge: Cambridge University Press, 2014), 13.
6. Manuel Salvador Acuña Zepeda and Jesús Emanuel Díaz Zepeda, 'Energy and Human Rights: A Perspective from Mexico', *Journal of Energy & Natural Resources Law* 35, no. 4 (2017): 377–80.
7. The term 'Ethics' refers to a critical and constructive study of moral norms and values.
8. Normative ethics considers the content of such terms as good, right and wrong. This research field includes critical analysis of ethical positions and constructive proposals on what is moral and what is not. Applied ethics is the research field that analyses concrete moral issues. Applied ethics often makes use of theoretical models from normative ethics.

9. For example, Henry Shue, *Basic Rights: Subsistence, Affluence and U.S. Foreign policy* (Princeton NJ: Princeton University Press, 1980); Martha C Nussbaum, *Creating Capabilities: The Human Development Approach* (Cambridge: The Belknap Press of Harvard University Press, 2011); Jack Donnelly, *Universal Human Rights in Theory and Practice*, 3rd ed. (Ithaca, NY: Cornell University Press, 2013); John Rawls, *A Theory of Justice* (Oxford: Oxford University Press 1971).
10. Shue (n 9) 13.
11. See Gilbert Rist, *The History of development: From Western origins to global faith*, 4th ed. (New York: Zed books, 2014).
12. Des Gasper, *The Ethics of Development* (Edinburgh: Edinburgh University Press, 2005).
13. The term good enough life is used to signify that there are many ideas about what a good life might entail, and it is difficult to obtain some consensus. However, a good enough life points to minimum conditions that most humans would need in order to lead their idea of a good life. These conditions include shelter, food and water.
14. Group rights are considered, for example, by Donnelly (n 7) 45–64.
15. Bradbrook and Gardam (n 3) 405, 409; Owoeye (n 1) 299f.
16. Owoeye (n 1) 293.
17. Shue (n 9) 13.
18. For an analysis of Shue's position, see Elizabeth Ashford, 'In What Sense is the Right to Subsistence a Basic Right?' *Journal of Social Philosophy* 488 (2009).
19. Shue (n 9) 19.
20. *Ibid.*, 19f.
21. *Ibid.*, 23.
22. The right to water is well supported in the international human rights regime. See United Nations, 'The human right to water and sanitation' (General Assembly Resolution 64/292, UN 2010).
23. Shue (n 9) 91.
24. Citizenship can be viewed in several ways besides a contractual relationship between citizens. See Hartley Dean *Welfare Rights and Social Policy* (Taylor and Francis 2002) for an extended historical and philosophical analysis of welfare rights and their relationship to different ideas about citizenship.
25. Rawls (n 9) 11ff.
26. *Ibid.*, 136ff.
27. *Ibid.*, 62.
28. *Ibid.*, 62.
29. *Ibid.*, 93.
30. *Ibid.*, 92ff.
31. Cliff Rochlin, 'Is Electricity a Right?' *The Electricity Journal* 31 (2002): 33f.
32. *Ibid.*, 35.
33. Shue (n 9) 15.
34. Rawls is aware of this limitation. He provides additional arguments that societies have responsibilities to assist each other in his later writings. See John Rawls, *The Law of Peoples* (Harvard University Press 1999).
35. Owoeye (n 1) 284; Bradbrook and Gardam (n 3) 390; International Energy Agency, *Energy and Air Pollution: World Energy Outlook Special Report* (IEA 2016) 55.
36. Jaakko Kuosmanen, 'Repackaging Human Rights: On the Justification and the Function of the Right to Development', *Journal of Global Ethics* 303 (2015): 308.
37. *Ibid.*, 308; 317. Kuosmanen uses the term 'foundational rights' instead of 'basic rights'.
38. Stephen Tully, 'The Human Right to Access Electricity', *The Electricity Journal* 30 (2006): 38.
39. Also in Bradbrook and Gardam (n 3); Owoeye (n 1).
40. Owoeye (n 1) 288, 294f.
41. See also Sin-hang Ngai (n 4) 606ff.
42. For example, see Lars Löfquist, 'Climate Change, Justice and the Right to Development', *Journal of Global Ethics* 251 (2011).

43. Donnelly (n 9) 100ff.
44. *Ibid.*, 102.
45. Nussbaum (n 9) 18ff.
46. *Ibid.*, 40f.
47. *Ibid.*, 33ff.
48. *Ibid.*, 62f.
49. Donnelly (n 9) 10.
50. Shue (n 9) 19.
51. Donnelly (n 9) 17.
52. Rawls (n 9) 62.
53. *Ibid.*, 440.
54. International Energy Agency, *Key World Energy Statistics 2016* (IEA, 2016), 24.
55. Intergovernmental Panel on Climate Change, *Climate Change 2014 Synthesis Report* (IPCC, 2015), 45ff.
56. International Energy Agency (n 54) 24.
57. United Nations, 'Paris Agreement' (UN 2015) Article 4, p. 4.
58. Stephen Tully, 'The Contribution of Human Rights to Universal Energy Access', *Northwestern Journal of International Rights* 518 (2006): 545.
59. Sovacool and Dworkin (n 5) 13.
60. Bradbrook and Gardam (n 3) 392f.
61. *Ibid.*, 409.
62. Nussbaum (n 9) 58.
63. Tully (n 38) 544.
64. International Energy Agency, *World Energy Outlook 2006* (IEA, 2006), 444.
65. International Energy Agency (n 35) 119.

## Disclosure statement

No potential conflict of interest was reported by the author.

## Notes on contributor

*Lars Löfquist* received his PhD degree in Theological Ethics in 2008. Lars has primarily conducted research in applied ethics with emphasis on humanitarian, development and energy questions. Two key research interests are how moral values underpin different conceptions of development and how we should evaluate different development paths.