



# **When darkness falls: Women's safety in refugee camps**

*A systematic literature review on the role of energy solutions  
for women*

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Bachelor's Thesis 15 credits, Spring semester 2021

Development and International Cooperation

## **Abstract**

Since the end of the 1990s, the number of forcibly displaced people has increased from 33 million to 80 million at the end of 2019. The living conditions within the refugee camps have progressed beyond emergency assistance, with the main objective being to provide short-term protection in refugee camps designed for short-term stays. However, the average time spent in a refugee camp is 20 years, and refugees often lack food security and power supply to meet basic needs such as cooking or lighting. Refugee settlements are stressful and unstable environments, especially for women and girls, who are vulnerable to various sexual and gender-based violence (SGBV) forms. A systematic literature review of eight peer-reviewed articles and seven semi-structured interviews are used in this study to assess the effectiveness of humanitarian energy initiatives in reducing SGBV against women in refugee camps. In this thesis, a feminist lens is used to shed more light and unlock place-based challenges to sustainable energy solutions. Our study's findings indicate that establishing a link between sexual and gender-based violence and energy is difficult, and we cannot rule out the possibility of an existing link. We assert, however, that the most effective approach to reducing SGBV among refugee women is not through energy interventions but through a combination of mixed long-term solutions that address the root causes of violence.

**Keywords:** Sustainable Energy Solutions; Sexual-Gender-Based Violence; Refugee camp; Women; Safety; Humanitarian; Development

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## **Acronyms and Abbreviations**

GPA - Global Plan of Action for Sustainable Energy in Situations of Displacement

SAFE - Safe Access to Fuel and Energy

UNHCR - United Nations High Commissioner for Refugees

WFP - World Food Programme

GBV - Gender-Based Violence

SGBV - Sexual-Gender Based Violence

UN - United Nations

NGO - Non-Governmental Organizations

IGO - Intergovernmental Organizations

IDP - Internally Displaced Person

SDG - Sustainable Development Goals

IOM - The International Organization of Migration

RE4R - Renewable Energy for Refugees

## 1.0 Introduction

Civilians are frequently caught in the crossfires of wars and conflicts, increasing their chances of being subjected to violence and harm. Hence, there has been a rise in the prevalence of refugees around the world as well as internally displaced persons (IDPs) within the country (Vu et al. 2014:3). Since the end of the 1990s, the number of forcibly displaced people has increased from 33 million to 80 million at the end of 2019. Syria, Venezuela, Afghanistan, South Sudan, and Myanmar accounted for the vast majority of refugees as of mid-2020 (UNHCR, 2007:108).

The living conditions within the refugee camps have progressed beyond emergency assistance, with the main objective being to provide vital necessities in order to keep the refugees alive. The sole purpose of a refugee camp is to provide short-term protection and they are designed for short-term stays, however the average time spent in a refugee camp is 20 years (UNHCR, 2016). Studies show that long-strayed refugee settlements are stressful and unstable environments, especially for women and girls, and inadequate food and water supply can endanger physical security (Lalla et al., 2020:2). Refugee women and girls, for example, are particularly vulnerable to various forms of sexual and gender-based violence (SGBV), such as rape, human trafficking, female circumcision, and forced early marriages. Previous research has found that refugee women who are constantly subjected to violence, experience persistent fear in the camps, resulting in poor health outcomes (Rosenow-Williams & Behmer, 2015:190).

Since refugee camps are rapidly constructed and intended to provide temporary accommodation, basic necessities, and immediate protection for refugees, they often lack power supply to meet basic needs such as cooking or lighting (UNHCR, 2007:108). Energy infrastructure is often viewed as a long-term strategy as opposed to a necessity in emergency management. Since the refugee camp's purpose is to serve as a temporary and instant solution, energy has been considered an issue within the field of development aid and thus not prioritized in humanitarian assistance (Lehne et al., 2016:141).

However, over the last decade, the humanitarian community has argued that clean and efficient cookstoves and fuels can have a great impact in reducing the prevalence of SGBV on refugee women in humanitarian settings. Various humanitarian energy programmes have since then been implemented in refugee communities, such as the Safe Access to Fuel and Energy initiative (SAFE), which was implemented by the United Nations High Commissioner for Refugees (UNHCR) and ended in 2018. The Global Plan of Action for Sustainable Energy in Situations of Displacement (GPA), came out in 2018, arguing that access to sustainable energy increases women's security in refugee camps. By providing cookstoves, for example, women are less likely to be exposed to SGBV while collecting firewood for cooking fuel. Furthermore, providing lighting solutions in refugee camps reduces women's risk of exposure to sexual violence at night. However, while these initiatives hold some merit at least theoretically, there has been insufficient empirical research on the potential role and impact of sustainable energy solutions on reducing SGBV for refugee

women and girls in refugee camps on the ground (Lalla et al., 2020:1; González, 2016:375). This has led to calls for more research that assesses the transformational capacity of sustainable energy solutions on the ground as a way to advance more sustainable and inclusive societies (González, 2016:375). In this thesis, we argue that the integration of a gender perspective can shed more light and unlock place-based challenges to sustainable energy solutions.

Therewith, through eight peer-reviewed articles and seven semi-structured interviews as a supplement, this study will investigate the extent to which humanitarian energy programmes reduces SGBV in refugee camps and whether or not sustainable energy could improve women's security in refugee camps. Before continuing with the following section, security will be defined in this study as personal security, which includes fundamental rights to life, legal principles, and freedom from threats to one's physical security in situations where these factors could affect one's (in)security (UNHCR, 1993). Further, the term SGBV will also be defined as an act committed by someone, despite the relationship with the victim, which are based on gender hierarchies and causes sexual, physical, and psychological harm (UNHCR, n.d).

## 1.1 Statement of the Problem

Over the last decade, the humanitarian community has used energy solutions as a justification for SGBV. In developing countries, management and collection of energy sources have long been associated with the woman's role (Baribieri et al, 2017:370). These activities have long been argued as risk factors in the humanitarian community, increasing women's vulnerability to SGBV (UNHCR, 2014:7-8; UNITAR, 2018:45). Although humanitarian energy programmes have been implemented, there is little scientific evidence to suggest that clean energy solutions are linked to SGBV. Hence, this study is essential as few scientific articles have investigated whether energy solutions have a link to SGBV. Refugee women are the most vulnerable group to all forms of SGBV. It is, therefore, crucial to understand which approaches could work to improve women's protection effectively.

## 1.2 Purpose

The purpose of this study is to assess the effectiveness of humanitarian energy initiatives in reducing SGBV against women in refugee camps. In doing so we also explore which alternative strategies may have potential to more successfully improve women's protection in refugee camps. Based on a review of the literature and interviews with different actors working on SGBV issues at various scales, this study will answer the following research questions.

## 1.3 Research Questions

- Does sustainable energy contribute to women's security in refugee camps?
- How can sustainable energy better tackle sexual and gender-based violence in camps?

## 1.4 Background

The following section provides a background on the importance and extent of energy access in refugee camps. Section 1.4.1 presents the humanitarian and development aspect of assistance in refugee camps. Section 1.4.2 presents the need for energy services in displaced settings. Section 1.4.3 and 1.4.4 describes two of the most extensive energy initiatives for refugees and people in displaced settings.

### 1.4.1 Humanitarian assistance and development

Humanitarian assistance and development work in different approaches with long-term and short-term support. For example, actors within the development sector are more involved with long-term development work in the global south, whilst humanitarian work is more concerned with short-term disaster relief operations. Therefore, refugee camps are managed by humanitarian aid (UNHCR, 2018). According to the humanitarian coalition, the vast number of crises that come under humanitarian assistance has already exceeded the emergency phase. The total number of refugees in the world was 25,4 million at the end of 2017, signifying a 2,9 million rise from 2016 (ibid). The living conditions within the refugee camps have progressed beyond emergency assistance, with the main objective being to provide vital necessities in order to keep the refugees alive. Sustainable long-term solutions have become increasingly more necessary; however, the UNHCR (2018) claims they will be unlikely to achieve in the immediate future. The international community acknowledges the need for aid to address short-term and long-term needs in conflict and disaster situations, although it has proven challenging (UNICEF et al., 2011).

Various projects in humanitarian work are based on annual funding, and thus long-term needs, e.g., energy programmes seem expensive at first glimpse. This is because humanitarian funding focuses solely on capital costs, i.e., the project's total cost that include non-recurring costs and excludes long-term expenditures such as fuel or maintenance (Grafham & Lahn, 2018:38). Energy infrastructure is often viewed as a long-term strategy as opposed to a necessity in emergency management. Therefore, since the refugee camp's purpose is to serve as a temporary and instant solution, energy has been considered an issue within the field of development aid and thus not prioritized in humanitarian assistance (Lehne et al., 2016:141).

It has been reported that the traditional way of cooking in refugee settlements poses health risks such as nutritional deficiencies and respiratory distress due to inhaling smoke (Baribieri et al, 2017:370). While the WFP provides a cash-based transfer to refugee households in order to manage food insecurity, the UNHCR provides stoves and firewood quotas to households. However, these quotas have been reported as insufficient, prompting refugees to venture outside the camps, searching for additional firewood. Those searching for additional firewood are typically women and girls, and they acquire firewood by exchanging it for food portions. However, these activities increase their risk of exposure as women still venture to the bush, thus making them more vulnerable to SGBV (ibid).



To understand whether energy programme implementations can reduce SGBV in refugee camps, it is also necessary to first understand which energy programmes are widely implemented in the humanitarian and development sector within displaced settings. Here, we review two programmes that have played a significant role in humanitarian energy development work: SAFE and GPA.

#### 1.4.2 Global Strategy for Safe Access to Fuel and Energy (SAFE)

The UNHCR developed and implemented Safe Access to Fuel and Energy (SAFE) in 2014. The goal of the programme is to meet the energy needs of refugees in displaced settings in a way that does not jeopardize their health or personal security nor cause harm to the surrounding environment (UNHCR, 2014:8). In addition, the strategy seeks to improve energy solutions for refugee households, e.g., improve lighting and access to clean energy, as well as in schools and medical clinics. In the strategy, it is argued that providing improved energy solutions to the refugee population will decrease the prevalence of SGBV and reduce conflict and existing pressure between refugees and host communities because of exploitation of natural resources (UNHCR, 2014:7-8).

The Safe Strategy has established four strategic objectives for relevant stakeholders to collaborate in order to meet the refugees' energy needs.

- **Preparation:** Incorporate energy requirements in emergency preparation and mitigation. To assure that the energy issue is not forgotten in crises, it is critical to develop early contingency planning with relevant stakeholders e.g., host country, and relevant partners.
- **Providing technologies and energy supplies:** When refugees arrive at the settlement, it is critical to provide them with an adequate cookstoves, reliable electricity, and solar lanterns. It is also critical that UNHCR and relevant actors educate refugees on the usage of technology.
- **Observation and collaboration:** Collaboration in all sectors within displaced settings is critical, primarily to assure that the refugee community has access and finds the new technology useful. Furthermore, it is critical to observe and perform analyses to assure that the usage and maintenance of stoves and lanterns are done correctly.
- **Recognition of energy sources:** At the start of a crisis, it is critical to instantly find alternative cooking methods that are safe, renewable, affordable, and adhere to local policies. It is also critical that the host community is assisted in collaborating with development partners to find a variety of energy sources that are both affordable and do not endanger the health and welfare of refugees nor have a significant impact on the surrounding environment. The proposed alternative energy sources cannot come at the expense of others (UNHCR, 2014:21).

#### 1.4.4 Global Plan of Action for Sustainable Energy in Situations of Displacement (GPA)

The Global Plan of Action for Sustainable Energy in Situations of Displacement (GPA) is a framework whose primary objective is to provide refugees and Internally Displaced Persons (IDPs) with access to clean, sufficient, and sustainable energy until 2030 by cooperating across multiple sectors (UNITAR, 2018:7). The framework was launched in 2018 and is a joint result of a collaboration between various actors e.g., emergency relief operations, development agencies, host communities, NGOs, INGOs, IGOs, and other relevant actors engaged with the allocation of energy resources to refugees (UNITAR, 2018:3). According to the GPA framework, to meet everyone's needs, it is critical that all actors involved are adequately prepared to provide energy solutions to the refugees. The energy must be produced in a way that is both dignifying and harmless to humans and nature, while also providing economic opportunities for refugees (ibid). Further, the framework's role is to improve and reinforce current energy programmes, such as SAFE, to increase energy access in refugee areas.

The GPA framework is built on a variety of medium, long-term and short-term recommendations from different actors. These recommendations were created to enhance the energy access in the household and refugee camps (UNITAR, 2018:3). Further, the framework recognizes five main challenges along with related recommendations for key stakeholders that have to be taken into consideration to assure energy access in displaced settings.

- **Access to energy is a low priority;** To officially acknowledge that the issue of energy should be a primary concern in the humanitarian sector. It is critical to implement bottom-up cooperation where various actors establish energy programmes and activities (UNITAR, 2018:8).
- **Energy programmes in refugee camps receive inadequate funding;** To further map, evaluate, and collect data on current funded programmes, as well as to engage in dialogue with various actors in order to improve the programmes (UNITAR, 2018:8).
- **Professional knowledge regarding implementation of energy services in displaced settings is limited;** To create a common platform for colleagues and actors to discuss challenges and ideas. Additionally, provide personalized educational programmes to increase knowledge in a certain area (UNITAR, 2018:9).
- **Refugees and IDPs are excluded within energy agendas;** To have dialogue between national actors in order to develop energy initiatives at a national level. Further, promote and recognize well-executed sustainability projects, as well as energy initiatives that link critical components e.g., food security, well-being, and housing (UNITAR, 2018:9).
- **Inadequate research on the role of energy in displaced settings;** In-depth research linking energy poverty and SGBV in refugee camps is lacking. It is necessary to conduct research on sustainable energy and gender, as well as other critical

components such as food safety and identification of potential risks of SGBV in refugee camps (UNITAR, 2018:45).

## 1.5 Thesis Disposition

The following section outlines the theoretical framework of this study. It discusses the feminist theory and feminist perspectives on refugees, security, and gender. The third section then discusses the methodology for the study in the third section. It presents the research design, data collection, and critical reflections. The fourth section offers an overview of existing research on the importance of energy and SGBV against women in refugee camps. The next section contains the empirical data found in this study, with the results of the interviews. The following section conducts a detailed analysis of the collected material and discusses the results through a feminist lens. The conclusion summarizes our findings and provides answers to the study's purpose and questions. We also conclude the section with nine recommendations for addressing SGBV against women in refugee camps.

## 2.0 Theoretical Framework

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*To understand the role of feminist theory and gendered security in refugee camps, we present in section 2.1 a feminist approach that argues that gender norms and gender dynamics are bolstered by society's patriarchal systems. We also go through a feminist interpretation of security and its arguments for gendered security and how these interpretations could be implemented in the humanitarian field.*

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Security is an essential part of this study as it is vital to understand whether sustainable energy programmes can improve women's security in refugee camps. The term "security" can be defined in various ways depending on the circumstances, as discussed in the following section. This study employs feminist theory to conduct an in-depth investigation of women's security in refugee camps. A feminist lens will help us understand security and insecurity issues and what causes insecurity in refugee camps. Furthermore, by examining energy programmes through a feminist lens, it is possible to determine if there is a link between energy and SGBV and what other factors may contribute to insecurity in the camps. According to feminist theories, gender hierarchies exist in societies, both nationally and internationally, at all levels (Tickner, 1992:9; Peoples & Vaughan-Williams, 2010:40), and this includes refugee camps. Using this lens, we will examine the relationship between power dynamics and insecurity in camps.

### 2.1 Feminist Theory

The feminist gender viewpoint goes into the suggestive qualities of "feminine" and "masculine", as well as the social hierarchy shaped by this idea that develop the discourses and systems of the society (Sjoberg, 2010:3). Household- and individual spheres are associated with feminine qualities, whereas foreign policies are generally interpreted in terms of masculine traits such as power and sovereignty (Peoples & Vaughan-Williams, 2010:39-40). In this division, the gender norms of rescuer and protected are most apparent (Sheehan, 2005:126). One having masculine traits, being self-sufficient, and performing brave rescues, while the other has feminine qualities, is helpless, and requires protection. Sheehan argues that women are frequently viewed as a vulnerable group who require safety inside of national borders. On the other hand, men are responsible for fighting for the nation and offering global security. Unequal gender relations are created and bolstered by patriarchal systems of society, thus resulting in these divisions (ibid:126).

The feminist theory challenges gendered binary systems and seeks to dismantle the constructed characteristics between various spheres (Peoples & Vaughan-Williams, 2010:40). These divisions need to be questioned by exploring their function in various situations and uprooting their hierarchical structure (ibid:8). Because global political debate and human perceptions of gender as a social construction are so firmly linked, it is critical to

acknowledge hierarchical structures built to perpetuate male domination and women's subordination (Tickner, 1992:9).

In what way, can a gender framework assist us in comprehending the idea of security beyond gender hierarchies? From a traditional perspective, the term security refers to national security, which can be defined as the use of physical force to defend sovereign nations against other nations and other potential threats. Feminist theory questions that viewpoint by extending the idea and discussing the insufficiencies within the state-centered conception of security (Tickner, 1992:8-10).

Feminist research examines different aspects of insecurity rather than solely the top-down level, thus making this theory applicable to our research as we try to understand what is the catalyst behind these systemic and indirect insecurities. Understanding these triggers allows us to identify if different energy strategies implemented by stakeholders in refugee camps can reduce or possibly eliminate SGBV in the camps. Furthermore, it allows us to better understand whether there are other factors that contribute to SGBV in a household: Is violence caused by a lack of energy, or by gender roles and systemic issues related to the patriarchy? Furthermore, the feminist lens assists us in distinguishing what causes SGBV within the camps and identify which strategies can address these issues.

Furthermore, feminist scholars such as Cynthia Enloe, have problematized traditional security discourse for having far too little female representation and emphasize that women experience security differently than men in various contexts (ibid). Men and women are affected differently when it comes to vulnerabilities during conflict and displacement. For example, it is common and increasingly reported that refugee women are exposed to SGBV both while fleeing and in the host community (Freedman, 2015:26; Mertus, 2004:257-258; Sheehan, 2005:125). Refugee women are generally stereotyped as weak and helpless, this is especially apparent when refugee women are included in statistics together with children (Freedman, 2015:20-22). Further, refugee women experience a variety of other gender-based issues in refugee camps. Women in refugee camps are expected to follow the gender stereotypes that remain, as women are expected to care for children and the sick, which raises their workload (Freedman, 2015:26; Mertus, 2004:258). Furthermore, it is important to note that men are influenced by gender stereotypes within refugee camps, which can impact men if they cannot fulfill their traditional role as breadwinners. As a result, changes in gender stereotypes can make men feel less masculine at home, which may explain the rise in domestic violence in refugee camps (ibid:37).

Many refugee camps are only designed for short-term stays, which means that much of what is required to make refugees' lives easier does not exist. This means that necessary tasks, such as fetching water, firewood, or access to sanitation, have become a daily risk for women (Freedman, 2015:35-36). Hence, a feminist lens enables us to link violence and insecurity beyond spheres through taking apart barriers of public, private, global, and national spheres. Therefore, we can draw correlations that women living in militarized settings are significantly more exposed to physical attacks, and therefore we can consider a link between global military aggression and enhanced abuse within private spheres (Peoples &

Vaughan-Williams, 2010:40). Hence, when discussing security issues, the feminist lens helps our study to assess the links among various forms of violence and systems by looking beyond spheres and changing the viewpoints of what could be seen as danger and target. For instance, the lens will help us determine whether having limited access to e.g., cooking stoves or firewood, will be dangerous for a woman's safety, or if there are other factors that cause her insecurity.

In addition to traditional security scholars, other critical security approaches believe that it is necessary to expand the perception of security and move away from the connection with military operations. Hence, they address the importance of including various dimensions of (in)securities e.g., economic, social, environmental, and political (Sheehan, 2005:44, 76). Feminist security studies go beyond the perception of security by also examining gender hierarchy at multiple levels, including the individual and societal. Security does not have to include warfare threats; there are several dimensions of insecurity that must be considered. Studies conducted through a feminist lens, according to Sheehan (2005:76), focus on factors where differences are the primary issue, such as differences in social power and inequality, as well as questions of justice (2005:76). These distinctions are relevant not only in humanitarian work, but also in our area of study. The feminist lens will identify gendered differences and stereotypes, structures, and norms within the refugee camp.

## 3.0 Research Design

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*The following section presents the methodology for this study, as well as data collection, limitations and critical reflections. To achieve our purpose, a systematic literature review was conducted, with semi-structured interviews as a supplement. Section 3.2 provides an overview of selected peer-reviewed articles. Section 3.3 offers an overview of the interview respondents, their relevance to the study and how the interviews were analyzed. The limitations of the study are presented in section 3.4. Section 3.5 discusses the validity and reliability of the study.*

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### 3.1 Method of Analysis

A systematic literature review of eight peer-reviewed articles and seven semi-structured interviews are used in this study to investigate the research problem, this method is called triangulation. The primary objective is to target the research object more precisely and effectively to understand the problem more accurately and comprehensively (Alvehus, 2013:71). This research assesses the effectiveness of humanitarian energy initiatives in reducing SGBV against women in refugee camps, and in doing so we also explore which alternative strategies have potential to more successfully improve women's security in refugee camps. To answer the purpose and research questions, we conducted a systematic literature review of humanitarian energy solutions, focusing on key themes such as cooking stoves, lighting and firewood, as well as SGBV prevention in refugee camps.

This thesis uses a systematic literature review which serves as a great method and tool since it allows us to focus on a specific question and analyze existing available research and data about sustainable energy to reduce SGBV in refugee camps. This method assists us in developing a systematic understanding of which solutions would effectively reduce SGBV in refugee camps. A literature review allows us to critically analyse both historic and current literature, data and research and contributes to investigating the problem in a systematic manner (Hart, 2018:3).

### 3.2 Data collection

This research relies on relevant secondary sources such as eight peer-reviewed articles (see table 1). In this study, we used Bryman's search process to find relevant scientific articles. The process begins with a broad search on the topic (2008:489-494). For example, in this study, we began by searching for various energy strategies that have been implemented in refugee camps and whether these strategies aim to tackle SGBV. The search was unstructured and the peer-reviewed articles were collected using the database Scopus and Södertörns University's database Söderscholar through a combination of keywords, e.g., "Sustainable," "Energy," "Poverty," "Solutions," "Gender-based violence," "Refugee," "Women." To find

literature that met our criteria, we used three filters: articles from peer-reviewed journals, articles written in English, and most cited articles with no specific publication year requirements. We did not have a requirement concerning publication date due to two factors: this field of research is relatively new, and to access as much data as possible to fulfill our purpose and research questions.

However, we discovered early on in the search process that there are very few scientific articles that have investigated this topic, with the majority of research coming from gray literature such as NGOs and UN reports. Hence we decided that it is necessary to use an additional method which in our case is semi-structured interviews to supplement this study.

*Table 1. Overview of the eight research articles.*

<b>Author &amp; Year</b>	<b>Journal</b>	<b>Method</b>	<b>Purpose</b>	<b>Conclusion</b>
Aubonne & Hernandez (2013).	<i>Energy research &amp; social science.</i>	Case study analysis of the Dadaab refugee camp.	Investigate how different camp characteristics could minimize the prevalence of SGBV among refugees.	The implemented measures were only partially successful; a thorough cross-camp study and acknowledging refugee camps as long-term settlements is also essential.
Listo (2018a).	<i>Energy research &amp; social science.</i>	Literature review of peer-reviewed articles.	From a feminist perspective, examine how energy plays a part in SGBV in refugee camps.	Linking firewood with rape is misleading; coping with GBV requires local solutions.
Listo (2018b).	<i>Energy research &amp; social science.</i>	Critical Discourse Analysis of energy poverty.	Present the feminist development scholarship's significance in the context of energy poverty and debunk gender myths.	There is a need for more energy and feminist researchers and policymakers to participate and pay attention to these issues in research and practice within energy research groups.
Abdelnour & Saeed (2014).	<i>International political sociology.</i>	Discourse Analysis.	Examine how fuel-efficient cooking stoves came to be seen as a universal panacea to prevent SGBV.	The promotion of simplistic technological solutions can unintentionally expand the burden of poverty.



Abdelnour & Pemberton-Pigott (2018).	<i>Energy research &amp; social science.</i>	Case study analysis	Discuss climate and energy policy consequences of decontextualized lab tests.	In Darfur, it is wrong to assume that every rural woman uses mud stoves and charcoal as their main resource; cookstoves should be reviewed in their intended environments.
Lalla et al. (2020).	<i>PLoS medicine.</i>	Ethnographic semi-structured interviews.	Get a more comprehensive understanding of how women in a Kenyan refugee camp experience insecurity.	Women did not feel secure in all areas of the refugee camp; unsafe and stressful environments can be harmful to one's health.
Robert & Morgan (2017).	<i>Reproductive health matters.</i>	Systematic literature review of peer-reviewed articles.	Address the “know-do” gap by synthesizing research on the efficacy of measures to tackle sexual violence against refugee women.	It is essential to develop long-term efforts between humanitarian and government sectors to assure security for all refugee women.
González (2016).	<i>Gender and development.</i>	Focus group interviews.	Investigate the effect of vulnerability and violence on the rights of women and girls in the Mbera camp.	Working on gender demands a cross-sectoral strategy to create a holistic action plan that considers the needs of both genders.

### 3.3 Semi-structured interview

As a supplement to our research, we conducted semi-structured interviews to assist us in answering our purpose and research questions. Due to the scarcity of scientific research, we supplemented the study with a total of seven semi-structured interviews with different individuals all working in different capacities with safety in refugee camps, including NGOs, research associates, independent consultants, and UN agencies.

We prepared an interview guide which consisted of open-ended questions designed to allow an open discussion (Alvehus, 2013:83; Bryman, 2008:415). We designed two separate interview guides that consisted of five pre-formulated open-ended questions. One for NGOs/IGOs and independent consultants, and another for researchers (See appendix A & B). The reason for creating two separate guides for these stakeholders is primarily to include their different perspectives about the link between energy and SGBV since there exists limited

scientific research that supports the arguments of NGOs/IGOs, regarding the reduction of SGBV through the implementation of energy programmes in refugee camps. Therefore, by using different interview guides it is intriguing to find the differences and similarities between the statements and arguments of these stakeholders regarding which strategies would be effective to reduce SGBV in refugee camps.

### 3.3.1 Respondents

In this study we conducted seven semi-structured interviews, including NGOs, research associates, independent consultants, and UN agencies (see table 2). Table 2 was created to offer a brief overview of the various respondents.

We contacted six out of seven respondents via the LinkedIn chat function and one through email received from the organization website. After making contact via LinkedIn, the conversation carried on by email. Further, we made a strategic selection when choosing respondents based on our criteria of at least three years of experience in either research/fieldwork/work with energy programmes in relation to gender issues in humanitarian settings. This is primarily because we want the respondents to have years of experience and expert knowledge of energy access and SGBV in displaced environments, in order to assist us in answering the study's purpose.

Due to the pandemic and that the respondents were based in different parts of the world, all interviews were conducted via zoom and recorded with the consent of all respondents. Every respondent was also given the option to be anonymous or referred to by their name and occupation. In this study we received confirmation from five out of respondents to use their first and last names. The interviews lasted between 25 and 45 minutes each. Furthermore, during the interview, respondents were informed that participation in the study was entirely voluntary and that they could opt out at any time.

*Table 2 - Information about the seven respondents.*

<b>Respondent</b>	<b>Occupation</b>	<b>Category</b>	<b>Experiences with Energy Programmes</b>	<b>Communication</b>	<b>Date</b>
Robert Mulindwa	Business Development Services Coordinator, Energi 4 Impact, Rwanda	NGO	5 years of experience working with energy programmes.	ZOOM	19/4-21
Philip Sandwell	Research associate, Imperial college, London.	Researcher	7 years of experience on renewable energy access and international development.	ZOOM	19/4-21
Respondent B	Senior advisor in sustainable humanitarian energy and development context	Independent consultant	15 years of experience as an energy professional within a humanitarian context.	ZOOM	19/4-21
Megan Gerrard	Director of Programme & Humanitarian Advisor, United	IGO	8 years of experience within energy and SGBV prevention	ZOOM	21/4-21

	Nations Foundation, USA		programmes.		
Raffaella Bellanca	Energy for Food Security Advisor, WFP, Italy	IGO	14 years of experience working with energy and development issues.	ZOOM	22/4-21
Respondent A	Senior Energy Officer, UNHCR	IGO	15 years of experience within humanitarian energy programmes.	ZOOM	23/4-21
Iwona Bisaga	Research associate, Modern Energy Cooking Services (MECS) Programme, Rwanda	Researcher	7 years of experience on humanitarian energy access work.	ZOOM	23/4-21

### 3.3.2 Thematic analysis

The empirical content of the interviews was analyzed using thematic analysis. Following Bryman (2008), we use thematic analysis as a method, which entails coding of all the empirical data. Coding is carried out in relation to one's purpose and questions, and identifies relevant words or phrases. Thus, these words or phrases are assigned various unique codes, which are then sorted into diverse categories and subcategories (ibid:528-530). The coding process is repeated until no more themes or categories can be created.

In our case, after we finished our interviews, we divided the transcription process evenly between ourselves. To avoid being influenced by each other's interpretation of the empirical material, we did the coding separately. Furthermore, once the coding was finished, we began to discuss the empirical content that we had obtained separately. Some of our codes differed from one another, but many were also similar. When we presented different codes and key themes, we had a dialogue in which we attempted to discuss the codes and themes' meaning in relation to our research, research questions and theoretical framework. This helped us understand each other's points of view, and ended up with the same codes and key themes as a result of the dialogue. The empirical result of each respondent is thus divided into key themes. The eight interviews are analyzed according to key themes concerning both the research and research questions. Hence, the perspectives of each respondent are considered relevant to the themes and thus, one single respondent could hold nuanced perspectives relevant to multiple themes.

### 3.4 Limitations

The study's original goal was to conduct a case study between two refugee settlements in Uganda, where we would interview refugee women about their perceived insecurity within the settlements and investigate if the GPA framework had any success. However, due to the pandemic, it was not possible to conduct a field study, and thus we had to adapt to the situation, which required us to change the purpose, research questions, and method in order to carry out this study. Instead, we used Zoom to interview respondents who are experts in our research area.

### 3.5 Validity and reliability

We have strived in this research to achieve high validity and reliability to improve the study's quality. Using multiple methods, according to Nachmias et al., increases the validity of one's study (Nachmias et al., 2015:170). This is something we were inspired by, and in this study, we used a systematic literature review and semi-structured interviews to collect and analyze as much data as possible. Furthermore, there is very little scientific data on our subject, and using several methods increases the validity of our study by allowing us to answer our purpose and questions. According to Alvehus, high validity refers to the study's ability to successfully investigate the study's intent (2013:122). In our case, we were able to achieve a higher level of validity by reviewing existing empirical evidence and including insights from different actors through interviews, allowing us to examine what we intended to investigate. However, since our research is focused on women in refugee camps, we believe that interviewing the women directly would have added to the study's validity. Unfortunately, due to the Corona pandemic, our planned field study was not possible.

According to Nachmias et al., there is always room to improve the reliability of one's research. (2015:131). In our case, we critically examined our measuring instrument mentioned in the previous sections 3.1 and 3.3. and ensured that these instruments are reliable to obtain the same results if other researchers conducted this study again. Our study ensured internal reliability by constantly discussing the results using several themes and codes mentioned in section 3.3.2, and using data from multiple sources strengthens this study's representation (Bryman, 2008:466).

## 4.0 Review of the literature

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*The following section introduces existing literature on energy access and SGBV in refugee camps. Section 4.1 presents literature regarding the importance of energy for long-term development in displaced settings. Section 4.2 offers literature on the security and exposure to SGBV among women in refugee camps.*

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### 4.1 Importance of energy

Access to energy has long been regarded as a development issue rather than a humanitarian issue, and thus, energy as a topic is relatively new in the humanitarian field. A significant number of previous research on the subject has focused on the relationship between energy and food security rather than the consequences or burdens of energy poverty (Lehne et al., 2016:141).

Four studies have looked at how energy is important for long-term societal development, as well as how it can make life easier for IDPs and refugees in humanitarian settings. For instance, Nerini et al. (2018:6) conducted a study investigating SDG 7's synergies and trade-offs to the remaining 16 goals. The study showed that sustainable energy is crucial for alleviating poverty, ensuring that everyone has access to food, affordable medical care, and economic opportunities for families (Nerini et al., 2018:6). The study mapped 109 SDG targets that work with SDG 7 and emphasized the significance of energy access. According to Nerini et al., energy has served as an essential element in improving physical and social infrastructure such as hospitals, schools, waste disposal systems etc, and helps advance a country's economic development. Further, In order to meet the world's energy needs, it is critical to combine local, suitable, centralized and decentralized energy infrastructures (ibid). Hence, with Nerini's research, it is evident that policymakers should place a greater emphasis on the energy issue in the development work.

The difficulty of obtaining energy is exemplified in post-disaster settings. It has been reported that approximately 80% of the world's refugee population has limited access to cooking and heating, with only 10% having reliable electricity supply and limits one's ability to cook, study, or work after nightfall (Moving Energy Initiative, 2019; Lahn & Grafham: 2015:18). However, neither the humanitarian nor government sectors consider energy access for refugees to be a primary concern (Bellanca, 2014:27; United Nations Foundation, 2017:1).

Due to limited access to energy within refugee camps, the refugee population has become reliant on kerosene lamps and candles for lighting, putting them at risk of fires or health problems. However, it has been reported that improved lighting is the most in-demand necessity in refugee households, as is improved access to adequate cooking fuel (UNHCR, 2015). Despite the high demand for improved access to energy in refugee camps, humanitarian priorities still fail to reflect this. The primary source of energy in refugee camps

is firewood and charcoal, commonly used for cooking practices (Lehne, et al., 2016:142). Furthermore, Lehne et al. investigated refugees' total energy usage in a study. According to their result, seven million refugees have a daily energy supply of no more than four hours in settlements and women usually spend an average of one hour per day collecting firewood (Lehne et al., 2016:145).

Several UN studies have found that there are several barriers to energy programmes in refugee camps, including a lack of funding and knowledge (UN, 2016; Bellanca, 2014:37). Furthermore, studies have shown that the energy services available in refugee camps are frequently dirty, insufficient, polluting, and dangerous, particularly for women's health but also for the environment (UN Foundation, 2017). According to Baribieri et al, almost all of the food supplied in the refugee settlement has to be prepared before consumption and the cooking method poses health risks such as nutritional deficiencies and respiratory distress inhaling smoke (2017:370). According to Grafham and Lahn (2015), there are numerous reasons why sustainable energy solutions can be beneficial. In addition to reducing carbon dioxide emissions, they believe that it can provide increased security for both men and women, improved health, and economic opportunities in refugee camps (ibid:35).

## 4.2 Exposure of SGBV among refugee women

Regardless of previous research linking war and sexual violence, there has been very minimal scientific research on the presence and extent of SGBV among refugees and IDPs. Furthermore, minimal research has been conducted on the variables that enhance women's exposure to violence in camps.

The majority of studies in this area has concentrated on the health effects of SGBV exposure. However, three studies have looked at the occurrence of SGBV in refugee camps. A study by Lalla et.al. conducted ethnographic semi-structured interviews with 20 women in Kakuma Camp, Kenya about the sources of insecurity. The study stresses that one of the main factors of insecurity is conflict with the host community, where robbers who sexually assault or kill infiltrate the camp by night (2020:10). There are several causes for refugee women's perceived insecurity in refugee camps, such as energy poverty or a lack of physical necessities, e.g., food, shelter and healthcare (Gladden, 2013:86; Lalla et al., 2020:14; Aubone & Hernandez, 2013:37).

Civilians are frequently caught in the crossfires of wars and conflicts, increasing the risk of being subjected to violence and harm. Hence, there has been a rise in the prevalence of refugees around the world as well as IDPs (Vu et al., 2014:4). Women are more at risk to be exposed to violence in terms of crises and conflicts. According to Vu et al. about 20% of the world's refugee women have been exposed to SGBV (2014:10). However, it has been documented that in the event of SGBV exposure, women and girls are shunned from the refugee community, mainly because of the associated stigma that follows. As a consequence, the actual number of SGBV in refugee camps remains in the dark. This has been confirmed in several studies, including Ho and Pavlish's ethnographic analysis in Rwandan refugee settlements (Ho & Pavlish, 2011:94). According to the authors' observations, there is a

culture taboo regarding sexual violence exposure. Women and girls intentionally choose not to report crimes to which they have been subjected, due to fear of expulsion from families or neighbors. In some instances, violence in close relationships by extended kinship, spouses or relatives is not recognized as an issue, and therefore these cases go unreported (Ho & Pavlish, 2011:94; Vu et al., 2014:11).

In addition, Ho and Pavlish (2011:89) concluded that refugee camps often do not maintain a functioning legal system where the offenders are actually convicted for the crime they have committed. These reasons are an additional factor that influences survivors not wanting to report in the event of exposure to SGBV as the culprits are usually not held accountable (Ho & Pavlish, 2011:94).

Despite the fact that refugee settlements are supposed to be a sanctuary for refugees, there have been several reports that girls and women are affected by various types of violence and oppression, including child marriage (Hutchinson et al., 2016:46). Child marriage persists for a range of factors. According to Hutchinson et al, families considered marriage as a way to protect the girl from potential sexual violence in the settlements, and thereby protect the family's pride (2016:47). Poverty can act as a catalyst, causing families to arrange marriages in the hopes of bettering their financial situation. Further, it has been reported that married girls rarely continue their education, and are exposed to constant sexual abuse, which has a negative impact on girls' mental well-being and has resulted in a higher incidence of suicide (ibid).

## 5.0 Result

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*This section presents the empirical result of eight peer-reviewed articles and seven semi-structured interviews with various actors working on SGBV issues among refugees at different levels. Section 5.1 presents the results of the articles based on different energy interventions, firewood, cooking stoves, and lighting. Articles that mention energy as a complementary strategy are covered in section 5.2. Section 5.3 is divided into various alternative solutions proposed by the authors. The interview respondents' views on the link between energy and SGBV are presented in section 5.4. Section 5.5 describes the respondents' views on the impact of energy programs. The main challenges in reducing SGBV are covered in section 5.6. Section 5.7 outlines the most effective approach to reduce SGBV, according to the respondents.*

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### 5.1 Energy inventions

#### 5.1.1 Firewood

Four out of eight articles found that providing firewood may reduce the incidents of SGBV only during firewood collection: However, it does not reduce the overall number of incidents.

Aubone and Hernandez (2013:35) conducted a case study analysis of the Dadaab refugee camp in Kenya to investigate how camp characteristics could either increase or decrease SGBV. In the study, the authors examined the UNHCR's evaluation of the implementation of the Dadaab firewood project in the camps. By providing firewood, the project was developed with the aim of decreasing the prevalence of sexual assault that occurred as a result of women collecting firewood. According to the UNHCR's assessment, there were several issues with the programme, mainly regarding execution and performance. The findings indicated that prevalence of sexual assault in the camp declined as a result of providing firewood: However the overall rates of sexual assault in the camp remained the same since the women still returned to the bush after being supplied with firewood, mostly to collect additional firewood to enhance the household income (Aubone & Hernandez, 2013:35; Robbers & Morgan, 2017:75).

Furthermore, it was noticed that firewood stores were only set up in two out of three camps within Dadaab, Hagadera, and Dagahaley. The majority of rapes reported in Dadaab occurred in the camps where the firewood projects were initiated. Aubone and Hernandez argue that this project was a failure. Despite the implementation of new initiatives and attempts to solve the issue, incidents of rape shifted to different context in the camp such as camp sanitation facilities (Listo, 2018a:175-176; Aubone & Hernandez, 2013:39). Furthermore, it turned out that the firewood project was unsuccessful in reducing rapes in the camps. Rather than protecting women from being raped, it resulted in an increased demand for firewood, driving up the price in the firewood stores, making it difficult for many to purchase it. Robbers and



Morgan, who conducted a systematic literature review, reached the same conclusion that, despite providing firewood, rapes do not decrease, and instead rape occurred elsewhere in the camp (Robbers & Morgan, 2017:75). However, the authors note in their findings that the project in Dadaab caused tension between refugees and nearby host communities since the host communities did not obtain the equal type of firewood support as the refugees (Robbers & Morgan, 2017:75). According to the results of the Aubone and Hernandez (2013) study, minor measures such as the firewood programme in Kenya have had short-term positive outcomes on reducing rape within the camps. However, the firewood project is not sustainable in the long term since women continue to collect firewood in the bush. Hence the authors recommend combining both short and long-term methods to ultimately reduce conflicts, improve the legal system, and enable the security of women in camps (ibid:37).

Listo (2018a:175) conducted a literature review on energy and SGBV and concluded that linking firewood with rapes is highly misleading, emphasizing that gathering firewood is not the primary source of violence in the camp. Furthermore, introducing different energy programmes is not a solution to ending violence since it addresses only a small fraction of the problem while ignoring the wider context. To claim that only women are affected by energy poverty should be criticized and dismissed as a gendered myth, according to Listo, as SGBV is not the cause of limited technological services. Instead SGBV should be regarded as gendered power and inequalities that are usually politically motivated (Listo, 2018a:175-176). Abdelnour and Saeed (2014:151) reached a similar conclusion as Listo, emphasizing the myth that cookstoves or energy solutions solve SGBV in the camps, while ignoring the complexities behind the emergence of violence in the camp. Furthermore, the authors question the use of cooking stoves and energy fuel by humanitarian organizations as a universal solution to combat rape in all contexts (ibid:146).

Further, Listo, Abdelnour, and Saeed have concluded that gender disparities and women's empowerment have been used as justifications for adding importance to energy programmes and technology, as well as the significant advantages that can be provided in terms of development. According to Listo these energy arguments undermine the purpose of feminism by ignoring societal gender structures and roles within the camp. The emphasis should be shifted to the fact that energy poverty is a general issue, not a female issue (Listo, 2018a:175). Hence, GBV that occurs during the firewood collection is only a small part of the larger issue of violence towards women within the camp. Thus, technological advancements or energy programmes such as firewood provision cannot solve or eliminate SGBV within camps (ibid:175).

### 5.1.2 Cooking stoves

Two out of the eight articles found that providing cooking stoves for women does not address the root causes of SGBV in refugee camps. For instance, Abdelnour and Saeed (2014:154) criticize the improved Cooking Stoves projects implemented by humanitarian organizations during the Darfur Crisis, Sudan, as an argument that improved cooking stoves will be effective to minimize rape in the camp. The Abdelnour and Saeed study refer to the situation as a "Rape-prevention-Stove-myth," arguing that allocating improved cooking stoves to

minimize SGBV in the camp ignores the fact that energy or technology are not the main causes of the violence that exists in the camp (ibid). According to their findings, the energy projects used to minimize SGBV in the camp received more consideration and funding, while other projects that tackled the main factors relating to structural violence in the camps e.g., social and educational innovations, received less attention and interest, thus making it more problematic for the women (Abdelnour & Saeed, 2014:154; Abdelnour & Pemberton-Pigott, 2018:197).

### 5.1.3 Lighting

Two of the eight studies investigated the role of improved lighting, such as solar lamps in refugee camps. However, the authors reached different conclusions about whether improved lighting reduces violence against women in refugee camps.

González (2016) conducted a study with three focus groups on women and girls in Mbera camp, Mauritania. González discovered from the focus groups that the women were scared of being attacked if they went out during nighttime and that increased lighting would increase their perceived safety in the camps (2016:382). The International Organization of Migration (IOM) previously implemented projects in Mbera camp, where they provided 400 solar lamps; however, González believes the project was a failure as it just covered a small portion of the camp (ibid). Listo (2018a:175), on the other hand, believes that increasing lighting in the camp will solely cover one component of the environment in the camp and will not be enough to increase women's safety. According to the author, lighting will only increase security in one area of the refugee camp, but the SGBV will shift and appear elsewhere in the camp where it is still dark. Hence, combating violence requires more than using failed energy interventions. Instead, other factors should be considered, e.g., enhanced understanding of the source of the violence and the driving factors of gender roles and structure in a community (ibid:175).

## 5.2 Energy as a Complementary strategy

Access to energy is mentioned in two out of eight studies as a component strategy for reducing vulnerabilities in refugee camps. Furthermore, both studies make similar recommendations for the most effective approaches to tackle SGBV in refugee camps.

Listo (2018a:174) reviewed a report on the Doro refugee camp in South Sudan by the Danish Refugee Council. According to the report, there is a need for increased availability of resources such as improved stoves and safer water gathering points and a need to redesign the camp to make it more long-term sustainable. According to Listo, these factors will not solve the violence in the camps, but will serve as a component strategy to reduce vulnerabilities and SGBV in the camps (ibid:174). In their analysis, Aubone and Hernandez (2013:24) also mentioned the importance of redesigning the camp structure. According to the authors, refugee camps should be designed with a more gender-sensitive approach. The current camp design is unsustainable because it solely offers short-term services that remained ineffective in minimizing SGBV in the camps (ibid:24).

### 5.3 Alternative solutions that are not energy-related

Two out of eight articles believe it is critical to include both sexes when implementing energy programmes, and three out of seven articles believe there is a need to implement an international database to make it easier to report cases of GBV in refugee camps.

#### 5.3.1 Gender inclusion

According to Listo (2018a), various cultures consider managing energy sources such as cooking and firewood to be a female responsibility. However, Listo believes it is critical to include both sexes when it comes to energy management, which will result in more women being mobilized to form empowerment groups (ibid:176). In this way, these initiatives can, in the long run, address the root cause of SGBV by changing the gender roles that exist in a household. In addition, by providing resources to the family, it may be possible to increase the household income if one of the members begins selling firewood or alternative fuel solutions. Furthermore, when more household members are equally committed, stress and food insecurity potentially reduce in the long run, resulting in lower SGBV in the household (Listo, 2018a:176). According to Listo's research, domestic violence occurred in the Doro refugee camp in South Sudan because the men were stressed about not providing financially to the household when the family was starving (ibid:176).

Energy programmes in Dadaab camp that include men to accompany women when they need to fetch firewood have also been reported to be efficient in terms of security. Rather than focusing solely on energy programmes, which ignore the root cause of violence, Liso believes that initiatives focusing on gender relations and norms are required to eradicate SGBV in refugee camps (Listo, 2018a:176). González agrees with Listo and believes that it is critical to create projects that dare to challenge existing social norms, as these destructive behaviors serve as a catalyst for SGBV in the home. Changes in social norms can help to reduce the normalization of partner-based violence, and more women may be willing to report abuse (2016:87).

#### 5.3.3 Implementation of a Database

Several studies have clarified the need for a centralized database system that facilitates reporting sexual and gender-based violence within camps (Aubone & Hernandez, 2013:24; Listo, 2018b:14; González, 2016:87). In their conclusion, Aubone and Hernandez, for example, stated that there is an urgent necessity to implement a database where precise data on the number of rape cases in different camps can be updated (2013:24). The authors advocate for establishing and maintaining an international database of refugee camps by relevant actors, such as humanitarians and policymakers. This database will track the number of cases of SGBV and other types of violence that occur in various camps. This facilitates analyzing different refugee camps and their designs (Aubone & Hernandez, 2013:40). González agrees with Aubone and Hernandez and believes that it is also critical to register the SGBV that occurs within households rather than only stranger-based violence since familiar violence is underreported in humanitarian reports. Obtaining a more detailed

database makes it easier to estimate the actual number of gendered violence cases within the camps and makes it possible to work with SGBV in refugee camps (González, 2016:87).

## 5.4 Interviews

### 5.4.1 Link between limited energy and SGBV

Two out of seven respondents believe that there is a link between limited energy access and the prevalence of SGBV in refugee camps. Four out of seven respondents believe that there is only a partial link between limited energy access and the prevalence of SGBV in refugee camps, whereas one respondent does not deny the possibility of a link, but argues that there is far too little evidence to establish a link.

Based on experience working with the United Nation Foundation, USA, Megan Gerrard believes that energy could play a part in physical, sexual, and psychological abuse in the home. If a woman does not have enough fuel for cooking, it can prompt an angry husband to react violently in some cases. However, Gerrard claims that a long history of cultural challenges plays a more significant part in domestic violence. Providing stoves or fuel will not erase the problem. However she adds, this could improve the conditions in the home and help lift the burden of women and girls. Further, Robert Mulindwa from Energy 4 Impact, Rwanda, agrees with Gerrard, and emphasizes there is a link between energy and SGBV in terms of improved security and opportunities. Access to energy solutions such as lighting could, according to Mulindwa, promote business and income generation, thereby engaging women to become entrepreneurs and could change the stereotypical gendered roles, making them less dependent on their husbands.

Several respondents believe that the link between limited energy and the prevalence of SGBV is only partial. On the other hand, Iwona Bisaga, Research associate on the Modern Energy Cooking Services (MECS) Programme, claims there is evidence from various organizations and energy programmes that consistently show the link between energy and the prevalence of SGBV against women in refugee camps. Bisaga emphasizes that women have the burden of energy procurement and have to rely on resources outside of the camp, while increasing their vulnerability and exposure to attacks and harassment. Further, Bisaga believes energy plays an important role in reducing SGBV in refugee camps. In addition, Bisaga highlights an energy project, Renewable Energy for Refugees (RE4R) which found that increased street lighting in a Rwandan refugee camp improved the feeling of safety and confidence in leaving home after dark, particularly for women. However she does not believe energy is the most effective strategy. Respondent A, senior energy officer, UNHCR, argues there's a partial link, since gathering firewood outside the camp, for example, only increases the risk of exposure. Although Philip Sandwell, Research Associate at Imperial College in the United Kingdom, and respondent B, who works as an Independent Consultant, agree with respondent A, they argue that there is no correlation in terms of cause and effect. The existing evidence linking energy and SGBV in refugee camps is solely anecdotal according to both Philip Sandwell and Raffaella Bellanca, who works for the World Food Programme in Italy as an Energy for Food

Security Adviser. However, Sandwell recognizes improved lighting and access to cooking stoves as beneficial for women.

Furthermore, respondent B makes the same point as Sandwell, stating that energy is a risk factor rather than a cause. Respondent B, on the other hand, suggests that the reason why UNHCR and other humanitarian organizations use energy as an argument and solution to SGBV in refugee camps, is mainly because they have not come up with a valid argument why energy is important and necessary, instead they use the argument to receive funding.

“The reason UNHCR and other organizations argue that energy is required in order to minimize rape and the risk of women being assaulted, is to receive funding from the general public. Arguing that energy is connected with reduced rape makes it easier to raise funds rather than to explain to donors why energy solely would improve the quality of life for households.” - *Respondent B*

#### 5.4.2 Risk of exposure

Three out of seven respondents have emphasized that limited access to energy will influence the risk of SGBV exposure in refugee camps. For instance, Gerrard believes energy is definitely a contributing factor to the increased risk of exposure to violence for women inside and outside refugee camps. However, lack of energy is not the only reason women and girls are vulnerable outside the camp.

“You can give everyone, say, in a dream scenario, gas to cook with, but you discover that they are still going out to collect firewood. And they are still being attacked or are subjected to gender-based violence outside of the camp. And so, why might that be happening? One major reason, of course, is that they're collecting and selling firewood to generate income.” - *Megan Gerrard*

Further, Gerrard emphasizes the importance of reducing the exposure of violence. Providing cooking stoves does not guarantee women will not be attacked. Gerrard, nonetheless, believes that energy interventions may potentially minimize the risks, such as providing cooking stoves to reduce the need to collect firewood on a regular basis. It is therefore, according to Gerrard, important to differentiate the risk of exposure and the incidents themselves. Sandwell agrees with Gerrard that the only link between energy and SGBV is the risk of exposure. Further, Sandwell believes that energy interventions such as improved lighting could enhance refugees' perception of safety.

Risk of exposure is one of several problems around SGBV according to respondent B. Access to energy such as solar lanterns or firewood, respondent B argues, could improve the quality of life. However, it will not guarantee women will not be raped because lack of access to energy is not the cause of violence. Respondent B stresses that humanitarian organizations have made several recommendations to reduce the risk of being exposed to SGBV within refugee camps, such as implementing public street lighting, constructing more lanterns near households, and improving cookstoves. Hence, focusing on risk factors rather than causations is critical to address the root causes of GBV in refugee camps.

“Going for firewood is not the cause of rape; men are the cause of that, but the environment in which you are, just as being in a dark street in south London is not the cause of rape, nor is it the cause of violence; it is the men. To truly address the root of the problem, gendered and equality lessons in all societal forms are required to reduce risk factors. That is why it is critical to discuss risk factors.” -*Respondent B*

## 5.5 Energy programmes

Five out of seven respondents believe that implementing energy programmes in refugee camps could be beneficial to the whole refugee community; however, each of the five respondents has a different view on the extent to which energy programmes could have an impact on a societal level. Four out of five respondents emphasize the positive impact that improved lighting could have on all refugees.

Robert Mulindwa and respondent A argue that lighting contributes to improved safety in refugee camps at night. Further Mulindwa believes access to better lighting would reduce the rate of crimes. According to Philip Sandwell, energy programmes have evolved over the last few years to include more than just the provision of cookstoves and energy programmes are more focused on development and less on immediate response. Further, Sandwell mentions that humanitarian organizations are finally recognizing that the majority of displacement situations have become long-term, necessitating a long-term solution. This allows organizations and other stakeholders to plan further in advance and apply a development mindset to improve the situation long-term, since energy access and SGBV are long-term issues. Megan Gerrard agrees that energy programmes have been somewhat successful. According to Gerrard, the Safe Access to Fuel and Energy (SAFE) initiative has been one of the most successful strategies thus far, but still has a long way to go.

Further, Gerrard believes it would be beneficial to include and provide training for men within energy programmes. In some cases, Gerrard has heard of men starting to cook and becoming involved in activities. Iwona Bisaga, on the other hand, emphasizes the need for a holistic approach, a combination of several components other than energy, such as education, health, or infrastructure, in order to reduce SGBV incidents in refugee camps.

According to Bisaga, energy programmes and energy access are not only essential for refugees, but require the involvement of the host community. Bisaga emphasizes that the host community is often living in similar conditions as refugees regarding the availability of energy resources and highlights the Global Plan of Action (GPA) framework, focusing on both host communities and refugees. The acronym for Safe Access to Fuel and Energy has been criticized by one out of every seven respondents. According to Rafaella Bellanca, the acronym SAFE associates energy with something to be afraid of, implying that safe access to energy is required because energy is harmful. Bellanca believes the acronym does not reflect the opportunity for development work. The concept of providing access to energy for women to minimize the incidents of SGBV is ineffective, according to Bellanca.

“Solving the problems by providing stoves or fuel is a really bad idea. One, because it does not work because that's not the only reason why people or women go out. Second, even if that was the case, keeping women in tents is not the solution. Women have the right as everybody else, to go out and do what they want, we should protect that right. So, the protection should be through dialogue and other ways to avoid violence or even addressing the root causes which are the limited resources.”

- *Raffaella Bellanca*

### 5.5.1 Funding challenges

Three out of seven respondents stressed that funding could be a major challenge for energy programmes, which could have negative consequences for refugees. For instance, Megan Gerrard claims that several energy programmes have failed in different ways due to short-term funding such as lack of resources, staff, technical expertise, or project managers. According to Gerrard, the most critical aspect is to ensure that energy programmes can continue in the long-term and provide all refugees in a camp or enough people to make a difference. Further, Gerrard highlights that energy programmes have failed or ended due to funding challenges.

In addition, Raffaella Bellanca recognizes that humanitarian actors often face funding challenges regarding follow-up and evaluation of a programme or project. It is, therefore, essential to convince donors to fund evaluation initiatives. Further, Bellanca states that evaluation is crucial and could change the outcome of the programme. For instance, technology interventions could malfunction after the programme period, suggesting that the programme failed without being registered in their report. According to Iwona Bisaga, lack of funding is a significant issue for refugees since they rely on donor funding.

### 5.5.2 Lack of Data

Four out of seven respondents believe there is insufficient data to determine whether improved access to energy is an effective strategy for reducing SGBV in refugee camps. According to Raffaella Bellanca there is no data from before and after the implementation of the SAFE and GPA initiatives, and no data to support a decrease in SGBV among women. Furthermore, Bellanca believes that interviewing refugees during the programmes is the best opportunity to collect data. However, she claims that this is not a reliable method of measuring the impact of energy programmes statistically. The majority of projects do not perform regular monitoring, and the evaluation is performed at the end of the project, therefore, Bellanca questions how energy programmes measure impact. Respondent A agrees with Bellanca that few evaluations are performed to measure impact.

“No one has been brave or visionary enough to study the ‘before and after’ effect. So, I think the link between energy and SGBV will always be in question” - *Respondent A*

Further, Iwona Bisaga agrees with Bellanca and respondent A, and claims there is insufficient data to make a statement whether energy access is an effective strategy to reduce the rate of SGBV in refugee camps. However, respondent B highlights that while domestic violence

represents the most common form of SGBV in refugee camps, many incidents are reported as stranger-based violence. There is a bias in the statistics of SGBV among women, according to respondent B, since women tend not to report their husbands, brothers, or uncles in case of violence or rape due to traditional societal expectations within their family. Another factor contributing to statistical bias, according to respondent B, is that women report stranger-based violence during firewood collection when the latter might not have been the activity they were actually engaged in when the attack occurred.

“If women have been out by themselves, whether they were walking for firewood or water or walking because they simply wanted to go for a walk, and something bad happened to them by a stranger, they tend to report that as, we had to walk for firewood and then we got attacked, even when it has nothing to do with firewood... because it is an acceptable excuse within that community because they know that women, especially in sub-Saharan Africa are responsible for cooking so they have to put themselves in that situation. Therefore, it makes it less their fault and makes it more about the situation they were in.” - *Respondent B*

## 5.6 Main challenges in reducing SGBV

Working with cultural gender norms, according to five out of seven respondents, is one of the most challenging and complicated aspects of reducing SGBV. Two out of seven respondents believe that the problem with SGBV in refugee camps stems from how the camps are designed from the start, emphasizing the increased need to promote development aspects within humanitarianism.

According to Megan Gerrard, cultural norms and poverty are the most significant challenges, both of which have exacerbated the situation. Girls are frequently dragged from school to gather firewood for their families. Furthermore, most schools charge a fee for the use of firewood to prepare school meals, and it is the girls' responsibility to ensure that the fee is paid to the school. Furthermore, Gerrard explains that as people become desperate, and begin selling sex in exchange for money or firewood, this increases their exposure to SGBV.

"Parents or mothers become desperate and send their daughters away in exchange for money, fuel, and possibly the hope of finding a better life, but in reality, they are being trafficked. Because desperation is such a huge issue, I don't believe there is a magic solution. We must approach these issues from a variety of angles, all at the same time." - *Megan Gerrard*

Rafaella emphasizes the importance of considering that women are victims of stranger-based violence, especially when women are more exposed to SGBV by family members such as their husbands, cousins, or neighbors. Hence, it is critical to reinforce programmes that focus on behavioral change in order to prevent violence in camp. Respondent B agrees with Rafaella on the importance of acknowledging that SGBV is committed against women by someone they know. In addition, respondent B criticizes UNHCR for focusing solely on stranger-based violence when addressing lighting and energy initiatives.

“It frustrates me that UNHCR only addresses stranger-based violence, which occurs when you walk out in the middle of the night and are attacked by a stranger. This is extremely rare; almost always, the majority of GBV in any decent record you read on



GBV are familiar. It's done by someone you know. Nonetheless, all of the solutions discussed by humanitarian energy and humanitarian organizations are aimed at stranger violence. Somehow they believe that street lights will make you safer.”  
- *Respondent B*

Further, respondent B criticizes humanitarian organizations for failing to address the underlying cause of GBV in refugee camps. Respondent B argues that because humanitarians are expected to be neutral and not to develop gender training programmes that address equality and gender norms, they are hesitant to create programmes that directly address root issues, such as cultural acceptance of violence against women and girls, for fear of being accused of not being neutral or judgmental of that society.

“Humanitarian organizations do not want to become embroiled in the political drama; if they conduct gender training, it is perceived as a judgment on that society or religion. Hence prevents them from running these types of programmes.”  
- *Respondent B*

According to Iwona Bisaga, the most difficult challenge is that victims of abuse do not report or discuss their experiences. Bisaga believes enforcing educational programmes that target all refugee community members to raise awareness about the underlying causes of gender-based violence is one way to manage SGBV. It is critical to discuss acceptable behavior, the definition of gender-based violence, and sexual harassment within the programme.

According to Robert Mulindwa, the most difficult challenge is that many refugee camps are poorly designed, exposing security issues. Hence, there is a need to redesign the structure of refugee camps to make it more secure for all members of the refugee community. Respondent B agrees on this point, but she also criticizes humanitarian principles. Respondent B argues that there is a need to evaluate the humanitarian sector and determine whether the humanitarians' primary goal is to keep people alive or improve their lives. A refugee settlement has an average lifespan of 21 years, implying the importance of enforcing development as part of humanitarianism. Respondent B also criticizes the humanitarian sector's handling of refugee camps worldwide, claiming that people's lives are not improving. Few people have access to a better education system or jobs, making it difficult to pursue a future career. According to Respondent B, feeling "trapped" may increase the exposure to violence in the camp. Therefore, changing and evolving the entire concept of humanitarianism is the most important and critical challenge.

## 5.7 Most effective approach for reducing SGBV

All seven respondents believe that the most effective approach for reducing SGBV among women in refugee camps is a combination of several solutions. Improved energy access is only a part of the solution. Two out of seven respondents emphasize that the opportunity for livelihood is an essential component to reduce SGBV. Two out of seven respondents highlight the inclusion of both women and men to address violence. Two out of seven respondents mention that education is a crucial component to reduce SGBV.

For instance, Iwona Bisaga states that energy access may not be the most effective strategy, however it is a part of mixed solutions and an essential part of the infrastructure in refugee camps. Further Bisaga believes that in order to reduce SGBV, social security focus programmes are needed to raise awareness and address the challenges regarding SGBV. For instance, education for both women and men, reducing the risk of exposure and providing livelihoods. Megan Gerrad agrees with Bisaga and recognizes that it is crucial to consider the gender elements and engage with men, women, boys and girls to reduce SGBV in refugee camps.

According to Robert Mulindwa, there is no one-size-fits-all solution to managing SGBV in refugee camps, and while energy is one strategy, there is a need to combine different strategies. However, Mulindwa believes that education is a critical component in empowering more women and girls. When more women have access to quality education, they are more likely to start their businesses and support their families. According to Mulindwa, most women are responsible for household activities, and Energy 4 Impact promotes women's empowerment through business initiatives in their programmes. As a result of these programmes, fewer households will be in financial distress, and girls will be less likely to be forced to prostitution in exchange for money or firewood. Philip Sandwell agrees with Mulindwa and emphasizes the importance of supplementing energy as a component of various solutions. Furthermore, Sandwell argues that there is a need to strengthen people's sense of belonging within the refugee community. For example, by creating meaningful jobs, the economy will grow, and more opportunities for refugees will be created. Therefore, Sandwell argues that by working and investing their time in that community, they would be less likely to commit violence.

Further, Sandwell emphasizes the importance of lighting to reduce the incidents of SGBV. Improved lighting and street lights around problem areas such as latrines will, according to Sandwell, minimize the need to leave the camp and therefore minimize attacks and exposure of violence outside and inside the camp and increase the feeling of safety. Rafaella Bellanca agrees with the other respondents that energy is not the only solution, it is however a part of a broader approach. According to Bellanca, in order to address SGBV in refugee camps, it is critical to improve the safety in the camp and minimize the conflict around natural resources.

## 6.0 Analysis & Discussion

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*The following section presents an analysis and discussion of the empirical data from the study. Section 6.1 provides a deeper analysis of the result, including eight peer-reviewed articles and seven semi structured interviews in relation to the theoretical framework. The analysis serves as a basis for the discussion part. Section 6.2 discusses the result, analysis and previous research according to the purpose and research questions.*

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### 6.1 Analysis

We can acknowledge that due to limited research on humanitarian energy programmes, it is difficult to establish a link between energy and SGBV, but we cannot rule out the possibility of an existing link. However, we can state that the most effective approach to reducing SGBV among women in refugee camps is a combination of mixed solutions that address the root causes of violence on multiple fronts for the greatest impact. For example, through gendered behavioral strategies or energy programmes that also includes men. Furthermore, implementing energy programmes to reduce violence in refugee camps is not a viable solution as it ignores the broader context. Improved energy access is only a small fraction of the solution; it is not the most effective strategy, but it is a complementary strategy for reducing SGBV. Several respondents emphasize the importance of reducing the risk of exposure to violence through energy intervention, such as providing cooking stoves, which will reduce the risk of exposure while also reducing the need for women to collect firewood on a regular basis.

The findings of the literature review contradict what several respondents have stated, namely that humanitarian energy programmes overlook the complexities that lead to the emergence of violence in refugee camps (Listo, 2018a:176). Furthermore, most of the findings in the literature criticize the connection made by several humanitarian energy programmes that only women are vulnerable to energy poverty. Some findings in literature argue that these connections made by humanitarian organizations should be criticized as a gendered myth as limited technological services are not a cause of SGBV (Abdelnour & Saeed, 2014:151; Listo, 2018a:175-176). Instead, SGBV should be viewed as gendered power and inequalities that usually are politically motivated. As mentioned earlier in our theoretical framework, Freedman believes that it is common to associate women with being weak and in need of protection (2015:20-22). Furthermore, the implementation of various energy programmes can be viewed as problematic from a feminist security standpoint, as these initiatives treat women as fragile and require protection through programmes that reduce the risk of exposure to violence. According to the feminist perspective, these programmes are not addressing the root cause of the problem, which is societal norms entwined with patriarchal structure (Peoples & Vaughan-Williams, 2010:40). Furthermore, it could be argued that by not developing energy programmes solely aimed at encouraging both men and women to participate in these initiatives, the root cause of the problem is ignored.

The majority of the literature and all seven respondents agreed that one of the most important ways to address SGBV is to develop programmes that dare to challenge the prevalent social norms in the refugee camp. The majority of findings emphasize the gender roles within refugee camps, where traditional gender stereotypes persist, where women are expected to care for children and the household. Simultaneously, the man is expected to perform his traditional role as breadwinner. According to Sheehan (2005:76), recognizing these gender differences are significant, as these roles and societal expectations can also serve as a catalyst for GBV. According to three out of seven respondents and literature findings, men are more likely to be aggressive toward their wives if they believe they do not financially fulfill their role as a breadwinner. Gender stereotypes have a strong influence on men, according to Freedman (2015:26) and Mertus (2004:258), and increased stress, as well as societal pressures, can explain the underlying cause of men's aggression toward their partners.

SAFE and GPA aim to promote energy initiatives, such as making it easier for women to access sustainable fuel and improved stoves to reduce their risk of exposure to sexual violence. Only one respondent raised concerns about these initiatives, claiming that they are flawed because they only increase gender roles in households. Both Freedman and Mertus would also question these energy initiatives, as humanitarian organizations recognize household responsibility as a female role and burden (Freedman, 2015:26; Mertus, 2004:258). These initiatives can also be criticized as problematic through the feminist lens because they were created by the humanitarian organization with the intention of keeping women inside the tents and minimizing their risk of exposure to violence. Hence with these programmes in place, humanitarian organizations continue to ignore the root causes of violence.

## 6.2 Discussion

Is the humanitarian energy initiative an effective solution to reduce sexual and gender-based violence in refugee camps? This is a question that has been repeatedly attempted to be answered during this study through both literature review and interviews with seven relevant respondents. According to our findings from research articles, many authors are skeptical of the assumption that women are more likely to be vulnerable to energy poverty, arguing that this assumption is simply a gendered myth (Abdelnour & Saeed, 2014:151; Listo, 2018a:175-176). The extent to which energy programmes could have an impact on a societal level was divided among respondents; however, all respondents unanimously state that the only link between energy and SGBV is the risk of exposure. Furthermore, as previously stated in the analysis, ascertaining whether or not there is a link between energy and SGBV is difficult. We cannot, however, rule out the possibility of one. Nonetheless, the findings indicate that addressing SGBV solely through energy interventions is ineffective in reducing the number of cases of SGBV in refugee camps and should instead be addressed through multiple programmes on different fronts for the most significant impact. However, we argue that there is a significant need to implement development within humanitarian principles because humanitarian workers address SGBV solely through short-term programmes and

initiatives that do not address the root cause of violence. Hence, ignoring the underlying causes of violence makes it even more difficult for women to live a life free of violence and abuse.

What needs to be addressed is whether different energy initiatives and guidelines from GPA and SAFE truly reduce the risk of SGBV exposure. Many energy programmes, such as SAFE and GPA mentioned previously in the background section, emphasize how improved lighting in refugee camps could reduce the risk of SGBV exposure and increase refugee women's perceived security. This was also previously observed in a previous research chapter and led to the same conclusion (Gladden, 2013:86; Aubone & Hernandez, 2013:37; Grafham and Lahn, 2015:35). However, we would argue based on a feminist lens, that there is an urgent need to shift the emphasis since improved lighting may increase the perception of security, but it will not address the root causes of violence. It is clear that SGBV is not caused by a lack of energy resources in women, and while some energy programmes are intended to reduce the risk of exposure to violence, violence will persist unless the root cause is addressed. Instead, we argue that in order to address SGBV, it is necessary to first understand the structural problems in society and thus identify the underlying factors that led to violence in a household in the first place (Sheehan, 2005:44, 76; Tickner, 1992:9). This would be possible by developing energy programmes that include more men and could gradually break down existing gender barriers. However, we believe that we cannot rule out the possibility that increased energy initiatives such as lighting or firewood commission reduce the risk of exposure to stranger-based violence since no empirical scientific research has been found to support this claim.

Based on the majority of our findings, it is clear that most energy initiatives implemented in humanitarian settings have focused on reducing energy poverty for women and households and potential violence against women in refugee camps. However, we argue based on a feminist lens, that it is problematic that humanitarian organizations have only focused on projects that address stranger-based violence in refugee camps, even though familiar violence accounts for the majority of SGBV prevalence. One might wonder why humanitarian organizations solely report stranger-based violence and seek funding for projects that only address a small percentage of sexual violence in refugee camps.

We believe it is crucial to assess how and to what extent humanitarian principles have impacted women's security in refugee camps. According to what was stated in the previous chapter, the role of humanitarianism is to work with short-term solution planning, even though there is a need to work with development and include long-term solutions in many aspects of the refugee community. As previously stated in this thesis, SGBV is not a short-term problem; therefore, long-term solutions are required to address the root causes of violence. Respondent B makes an important statement that explains humanitarian organizations' fear of being questioned about their neutrality and their avoidance of implementing gendered behavior projects within refugee camps. One might wonder if the principles of neutrality are more important than human life. Feminist theories would argue that there must be a limit to how much one can ignore the problem and act passively. The

passivity from humanitarian organizations is not only a reclusive act, but it is also dangerous to women. It will only create a vicious circle where men and women continue to play their gender roles, and destructive behavior will continue.

## 7.0 Conclusion & Recommendations

The purpose of this study was to investigate the role of humanitarian energy initiatives in reducing SGBV against women in refugee camps. In doing so we also explored which alternative strategies may have potential to more successfully improve women's protection in refugee camps. To be able to answer our purpose, we attempted to discuss whether sustainable energy contributes to women's security in refugee camps. With the help of the findings from both literature and interviews, we were able to answer the study research question and purpose, and we argue, based on the feminist lens, that it is difficult to determine whether there is a link between SGBV and energy, but we cannot rule out the possibility of an existing link. We assert, however, that the most robust approach to reduce SGBV among refugee women is not solely through energy interventions but rather through a combination of mixed long-term solutions that address the underlying causes of violence. Energy interventions, such as improved lighting, improved cooking stoves, and firewood provision, may reduce women's risk of SGBV exposure; however, we argue that these interventions should only be used as a complementary strategy for reducing SGBV in refugee camps. Further, we want to emphasize the critical importance of implementing development aspects within humanitarian principles. In order to create a sustainable world free from violence and abuse, humanitarian organizations must recognize that the concept of short-term refugee camps is impossible, if not irresponsible, and that there is an urgent need to incorporate development into humanitarianism.

Finally, It is important to note that the study could have been strengthened if we had conducted a field study and directly interviewed refugee women about their safety, as well as interviewed both refugee men and women on how to reduce violence in the refugee camp. Hence, we have based our conclusion on our findings since we were unable to conduct a field study.

### 7.1 Recommendations

We have compiled a total of nine recommendations based on our findings from both our literature review and interviews, which we believe can aid in successfully tackling SGBV within the refugee camp. No one recommendation is more important than the other. They are all intertwined and must be addressed as such, so that all refugees can live a sustainable and dignified life free from violence and abuse. Furthermore, there's an urgent need for the humanitarian sector to evaluate its humanitarian principles in order to tackle and potentially eliminate SGBV in refugee camps.

- An expanded lighting initiative: It is critical to cover large areas of refugee camps with solar street lighting, as there is a risk that the violence will move to a darker alley.
- The importance of involving host communities: Many host communities live in similar conditions to refugees and share the same natural resources. In order to avoid tension and violence between certain groups, GPA also emphasizes the importance of involving them early on in the implementation of various energy programmes.

- The significance of investing in long-term initiatives: Humanitarian organizations must prioritize the removal of short-term funding. Long-term programmes will have a more significant impact on the refugee community's ability to live more sustainably.
- Incorporate both genders into energy-related programmes: Improved cookstoves and firewood initiatives in humanitarian energy programmes are currently aimed at reducing women's risk of exposure to violence. We see a considerable need to shift the emphasis and include more men into energy programs, which can gradually break down the gender barriers.
- Increased emphasis on regular monitoring and evaluation: By conducting regular monitoring and evaluation before and after establishing a programme, it is possible to measure the programme's actual outcome and evaluate if it has a successful impact.
- Encourage development within humanitarianism: To create a sustainable future for all refugees, humanitarian organizations must recognize that the concept of a short-term refugee camp is impossible, if not irresponsible, and thus there is an urgent need to enforce development as part of humanitarianism.
- Enforce educational programmes to raise awareness about the underlying causes of SGBV: Humanitarian organizations must step up and enforce educational programmes that target all refugee community members. It is critical to address subjects such as toxic masculinity, gender roles, stigma, domestic violence, and the definitions of gender-based violence and consent.
- Promoting entrepreneurship within refugee camps: Creating jobs and work opportunities fosters a sense of belonging within the refugee community and is also an essential component for women to gain financial empowerment.
- Implementation of an international database system of reported SGBV: There is an urgent need to implement a database where humanitarians and policymakers can update accurate data on the number of rape cases in different camps. A more detailed database will allow for the identification of the actual number of SGBV cases between camps.



## 9.0 References

### 9.1 Peer-reviewed articles

- Abdelnour, S. & Pemberton-Pigott, C. (2018). For cook and climate: Certify cookstoves in their contexts of use. *Energy research & social science*, 2018-10, Vol.44, pp.196-198 **DOI:** 10.1016/j.erss.2018.05.014
- Abdelnour, S. & Saeed, A. M. (2014). Technologizing Humanitarian Space: Darfur Advocacy and the Rape-Stove Panacea. *International political sociology*, 2014-06-01, Vol.8 (2), pp.145-163 **DOI:** 10.1111/ips.12049
- Aubone, A. & Hernandez, J. (2013). Assessing Refugee Camp Characteristics and The Occurrence of Sexual Violence: A Preliminary Analysis of the Dadaab Complex. *Refugee survey quarterly*, 2013-12-01, Vol.32 (4), pp.22-40 **DOI:** 10.1093/rsq/hdt015
- Barbieri, J., Riva, F., & Colombo, E., (2017). Cooking in refugee camps and informal settlements: A review of available technologies and impacts on the socio-economic and environmental perspective. *Sustainable energy technologies and assessments*, 2017-08, Vol.22, pp.194-207 **DOI:** 10.1016/j.seta.2017.02.007
- González, O. (2016). Refugees and 'host communities' facing gender-based violence: developing an area-based approach to gender-based violence around Mbera Camp, Mauritania. *Gender and development*, 01 September 2016, Vol.24(3), pp.375-390. **DOI:** 10.1080/13552074.2016.1233669
- Ho, A. & Pavlish, C. (2011). Indivisibility of Accountability and Empowerment in Tackling Gender-Based Violence: Lessons from a Refugee Camp in Rwanda. *Journal of refugee studies*, 2011-03, Vol.24 (1), pp.88-109. **DOI:** 10.1093/jrs/feq052
- Hutchinson, A., Waterhouse, P., March-McDonald, J., Neal, S. & Ingham, R. (2016). Understanding Early Marriage and Transactional Sex in the Context of Armed Conflict: Protection at a Price. *International perspectives on sexual and reproductive health*, 2016-03-01, Vol.42 (1), pp.45-49. **DOI:** 10.1363/42e0416
- Lalla, A., Ginsbach, K., Penney, N., Shamsudin, A., & Oka, R. (2020). Exploring sources of insecurity for Ethiopian Oromo and Somali women who have given birth in Kakuma Refugee Camp: A Qualitative Study. *PLoS medicine*, 2020-03-24, Vol.17 (3), pp.1-19. **DOI:** 10.1371/journal.pmed.1003066
- Lehne, J., Blyth, W., Lahn, G., Bazilian, M. & Grafham, O. (2016). Energy services for refugees and displaced people. *Energy strategy reviews*, 2016-11, Vol.13-14, pp.134-146. **DOI:** 10.1016/j.esr.2016.08.008
- Listo, R. (2018). Gender myths in energy poverty literature: A Critical Discourse Analysis. *Energy research & social science*, 2018-04, Vol.38, pp.9-18 **DOI:** 10.1016/j.erss.2018.01.010

Listo, R. (2018). Preventing violence against women and girls in refugee and displaced person camps: Is energy access the solution?. *Energy research & social science*, 2018-10, Vol.44, pp.172-177 **DOI:** 10.1016/j.erss.2018.05.012

Nerini, F. F., Tomei, J., Seng, L., Bisaga, I., Parikh, P., Black, M., Borrion, A., Spataru, C., Castan-Broto, V., Anandarajah, G., Milligan, B. & Mulugetta, Y. (2018). MAPPING SYNERGIES AND TRADE-OFFS BETWEEN ENERGY AND THE SUSTAINABLE DEVELOPMENT GOALS. *Nature Publishing Group*. Volume 3, Issue 1, 1 January 2018, pp.10-15. **DOI:** 10.1038/s41560-017-0036-5

Reddy, B. S. (2015). Access to modern energy services: An economic and policy framework. *Renewable & sustainable energy reviews*, 2015-07, Vol.47, pp.198-212. **DOI:** 10.1016/j.rser.2015.03.058

Robbers, G. & Morgan, A. (2017). Programme potential for the prevention of and response to sexual violence among female refugees: a literature review. *Reproductive health matters*, 2017-11-30, Vol.25 (51), pp.69-89 **DOI:** 10.1080/09688080.2017.1401893

Rosenow-Williams, K. & Behmer, K. (2015). Gendered Environmental Security in IDP and Refugee Camps. *Peace review (Palo Alto, Calif.)*, 2015-04-03, Vol.27 (2), pp.188-195. **DOI:** 10.1080/10402659.2015.1037627

Vu, A., Adam, A., Wirtz, A., Pham, K., Rubenstein, L., Glass, N., Beyrer, C. & Singh, S. (2014). The Prevalence of Sexual Violence among Female Refugees in Complex Humanitarian Emergencies: a Systematic Review and Meta-analysis. *PLoS currents*, 2014-03-18, Vol.6. pp.1-19. **DOI:** 10.1371/currents.dis.835f10778fd80ae031aac12d3b533ca7

## 9.2 Printed Sources

Alvehus, J. (2013). *Skriva uppsats med kvalitativ metod: En handbok*. (2, uppl). Stockholm: Liber.

Bellanca, R. (2014). *Sustainable Energy Provision Among Displaced Populations: Policy and Practice*. London: Moving Energy Initiative.

Bryman, A. (2008). *Samhällsvetenskapliga metoder*. 3. Edition. Stockholm: Liber

Freedman, J. (2015). *Gendering the International Asylum and Refugee Debate*. 2. Edition red. New York: Palgrave Macmillan.

Hart, C. (2018). *Doing a literature review : releasing the research imagination*. 2. Edition. Thousand Oaks, CA : SAGE Publications.

Mertus, J. (2004). "Sovereignty, Gender, and Displacement" in E. Newman & J. van Selm, red. *Refugees and Forced Displacement: International Security, Human Vulnerability, and the State*. Tokyo:United Nations University Press.

Nachmias, C., Nachmias, D. & DeWaard, J. (2015). *Research Methods in the Social Sciences*. 8. Edition. New York: Macmillan Learning.

Peoples, C. & Vaughan-Williams, N. (2010). *Critical Security Studies: An Introduction*. New York: Routledge.

Sheehan, M. (2005). *International Security: An analytical Survey*. Boulder, Colo. ; London: Lynne Rienner Publishers.

Sjoberg, L. (2010). *Gender and International Security: Feminist Perspectives*. New York: Routledge.

Tickner, J. A. (1992). *Gender in International Relations: Feminist Perspectives on Achieving Global Security*. New York: Columbia University Press.

### 9.3 Electronic sources

Grafham & Lahn (2018). *The Cost of Fueling Humanitarian Aid. Moving Energy Initiative*. Retrieved (2021/04/05) from <https://www.chathamhouse.org/sites/default/files/publications/research/2018-12-10-Costs-Humanitarian-Aid2.pdf>

Moving Energy Initiative (2019). *Why this matters*. Retrieved (2020/04/15) from <https://mei.chathamhouse.org/what-we-do/why-matters>

UN (2016). *Leaving no one behind: Energy for humanitarian response and sustainable development*. Retrieved (2020/04/15) from <https://sustainabledevelopment.un.org/index.php?page=view&type=13&nr=2016&menu=1634>

UN (n.d). *THE 17 GOALS*. Retrieved (2020/04/15) from <https://sdgs.un.org/goals>

UN (2017). *The Sustainable Development Goals Report 2017*. Retrieved (2020/04/17) from <https://unstats.un.org/sdgs/files/report/2017/TheSustainableDevelopmentGoalsReport2017.pdf>

UNHCR (2014). *Global Strategy FOR SAFE ACCESS TO FUEL AND ENERGY (SAFE)- A Unhcr Strategy 2014-2018*. Retrieved (2021/04/07) from <https://www.unhcr.org/530f11ee6>

UNHCR (2018). *Global Trends, Forced Displacement in 2017*. Retrieved (2020/04/02) from <https://www.unhcr.org/globaltrends2017/>

UNHCR (2007). *Handbook for Emergencies*. Retrieved (2021/03/029) from [https://www.google.com/url?q=https://www.ifrc.org/PageFiles/95884/D.01.03.%2520Handbook%2520for%2520Emergencies\\_UNHCR.pdf&sa=D&ust=1606771114698000&usg=AOvVaw3TNfMc3bBlCCJ3FZo2cL4u](https://www.google.com/url?q=https://www.ifrc.org/PageFiles/95884/D.01.03.%2520Handbook%2520for%2520Emergencies_UNHCR.pdf&sa=D&ust=1606771114698000&usg=AOvVaw3TNfMc3bBlCCJ3FZo2cL4u).

UNHCR (2015). *Innovation Service - Light impacts SGBV, but not in the way you think*. Retrieved (2020/04/12) from <https://www.unhcr.org/innovation/light-impacts-sgbv-but-not-in-the-way-you-think/>

UNHCR (2016). *Missing Out: Refugee Education in Crisis*. Retrieved (2021/03/28) from

<https://www.unhcr.org/5943e8a34.pdf>.

UNHCR (n.d). *Sexual and gender based violence (SGBV) prevention and response*. Retrieved (2021/05/05) from <https://emergency.unhcr.org/entry/60283/sexual-and-gender-based-violence-sgbv-prevention-and-response>

UNHCR (1993). *The personal security of refugees*, 5 May 1993, EC/1993/SCP/CRP.3, Retrieved (2021/03/28) from <https://www.refworld.org/docid/3ae68cd10.html>.

UNICEF, UNDP, UNFP & UNOPS (2011). *Making the Transition from Emergency to Recovery and Development*. Retrieved (2021/03/28) from [https://www.unicef.org/about/execboard/files/110901\\_Joint\\_disc\\_S-Sudan\\_FINAL.pdf?fbclid=IwAR0\\_xajGUb1nNjjPLvmUWTghyl4\\_1hPARd5MhiV5DGqo84W3XqlUozkOpog](https://www.unicef.org/about/execboard/files/110901_Joint_disc_S-Sudan_FINAL.pdf?fbclid=IwAR0_xajGUb1nNjjPLvmUWTghyl4_1hPARd5MhiV5DGqo84W3XqlUozkOpog).

UNITAR (2018). *The Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement- Framework for Action*. Retrieved (2021/04/22) from [https://unitar.org/sites/default/files/media/file/gpa\\_framework\\_final-compressed.pdf](https://unitar.org/sites/default/files/media/file/gpa_framework_final-compressed.pdf)

United Nations Foundation (2017). *Mini-/Micro-grids for Refugee Camp Settings A Side Event at the Safe Access to Fuel and Energy (SAFE) Humanitarian Workshop*. Retrieved (2021/04/14) from [https://www.safefuelandenergy.org/files/SAFE%20Mini-Grids\\_Concept%20Note\\_v1.1.pdf](https://www.safefuelandenergy.org/files/SAFE%20Mini-Grids_Concept%20Note_v1.1.pdf)

# Appendix A

## Interview guide - NGO / UN -agencies

Hi.....,

We are two students from Södertörn University in Stockholm, Sweden. We are writing our bachelor's thesis on whether energy solutions can potentially reduce sexual and gender-based violence in refugee camps or if there are other, more effective solutions. There is currently a research gap when it comes to the link between sustainable energy solutions and women's security in refugee camps. Therefore, we'd like to hear more about your thoughts on the subject and would like to set up a 20-30 minute Zoom interview with you. Here's an example of questions we'd like to ask:

**1:** From your experience, do you believe there is a link between limited energy and the prevalence of SGBV in refugee camps?

**1a:** If yes → In what way?

**1b:** If no → Why not?

**2:** Do you believe that lack of energy access is the main cause of SGBV or just an enabling factor? In which case what are the main cause?

**3:** Do you believe that providing energy solutions to women in refugee camps could be the most effective strategy for reducing SGBV? Or do you believe that there are other more effective strategies or solutions to reduce SGBV?

**3a:** What do you believe, are the challenges in reducing violence in refugee camps?

**4:** FN → Have you seen a decrease in SGBV among women in refuge camps since the implementation of Safe access to fuel and energy strategy, or the framework The Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement (GPA)? Feel free to develop.  
NGO/Independent → Have you seen a decrease in SGBV among women in refugee camps since implementation of various Energy programmes? Feel free to develop.

**5:** Do you believe that better lighting or access to cooking stoves would benefit refugee women in terms of security?

**6:** Many researchers argue that there is insufficient evidence regarding the link between sustainable energy solutions and reduced SGBV in refugee camps. What are your thoughts about this statement? Are there reasons to be skeptical or hopeful?

Best regards,

Mona Ghasemi and Andrea Thorgren

# Appendix B

## Interview guide - Researcher & Independent Consultant

Hi.....,

We are two students from Södertörn University in Stockholm, Sweden. We are writing our bachelor's thesis on whether energy solutions can potentially reduce sexual and gender-based violence in refugee camps or if there are other, more effective solutions. There is currently a research gap when it comes to the link between sustainable energy solutions and women's security in refugee camps. Therefore, we'd like to hear more about your thoughts on the subject and would like to set up a 20-30 minute Zoom interview with you. Here's an example of questions we'd like to ask:

**1:** From your experience, do you believe there is a link between limited energy and the prevalence of SGBV in refugee camps?

**1a:** If yes → In what way?

**1b:** If no → Why not?

**2:** Do you believe that providing energy solutions to women in refugee camps could be the most effective strategy for reducing SGBV? Or do you believe that there are other more effective strategies or solutions to reduce SGBV?

**3:** What do you believe, are the challenges in reducing violence in refugee camps?

**4:** What are your thoughts on energy-related programmes like SAFE and GPA framework, which aim to improve security and reduce SGBV by providing access to sustainable energy solutions? Can you reflect on their ambitions, assumptions, challenges and opportunities?

**5:** Do you believe that better lighting or access to cooking stoves would benefit refugee women in terms of security?

**6:** Access to sustainable energy, according to UNHCR and NGOs, improves women's security in refugee camps. Women are less likely to be exposed to SGBV if cooking stoves are provided to replace the collection of firewood for cooking fuel, which it is argued, is a key driver of SGBV. What do you think about this statement?

Best regards,

Mona Ghasemi and Andrea Thorgren