Guidelines for Preparing Manuscript for the ICSEEGT 2025: An overview

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**Abstract.** The abstract should be concise, usually between 150 and 250 words, written in a single paragraph without references, figures, or equations. It must briefly highlight the purpose, methodology, results, and key conclusions of the study. Following the abstract, authors should provide 4–6 keywords, separated by commas, to facilitate indexing.

**Keywords.** Renewable Energy, Wastewater Treatment, Wind Power, Green Hydrogen, Climate Change Policy, Carbon Neutrality

1. Introduction

When preparing a conference paper, authors should follow the standard formatting rules to ensure consistency across all submissions. The preferred font is Arial, with the title set in 18-point bold, author names in 12-point, and the main text in 11-point size. The abstract and keywords should also be written in 10-point font. The paper must be typed in single line spacing and formatted according to the margins defined in the official template for each section. Paragraphs should not be indented, and a blank line should be inserted to separate sections. After the first paragraph in each section, all subsequent paragraphs must begin with a 0.3-inch indent on the first line.

The expected page limit is 8–10 pages, including figures, tables, references, and appendices. Authors must submit their papers in the specified format; Microsoft Word (.docx) is mandatory, and LaTeX submissions will only be accepted if explicitly approved. The template currently follows a single-column format, but authors should note that the final publication may be converted to double-column layout during the proceedings production stage. Additional formatting requirements are provided in the separate detailed guidelines document in section 1.1.

Please note that the section headings should be numbered (e.g., 1, 2, 3), left-aligned, written in 11-point, and use title case (capitalize the first letter of major words). Subsection headings should be numbered as 1.1, 1.2, 2.1, etc., written in 11-point bold, left-aligned, and in sentence case (capitalize only the first letter of the first word and proper nouns).

*1. Example Sub-subsection Heading*

Sub-subsection headings should be Arial, 10-point, bold italic, left-aligned, and numbered consecutively (e.g., 1.1.1, 1.1.2). These may be used for detailed breakdowns within subsections

*1.1.1 Figures Guidelines*

Figures should be clear, high-quality, and easy to interpret. The minimum resolution must be 300 dpi to ensure readability in both digital and print formats. Acceptable file formats include .jpg, .png, and .tif; authors are advised to avoid low-resolution or compressed images. Overly complex or low-contrast diagrams should be avoided to maintain clarity when scaled or printed in black and white.

All figures must be centered, numbered consecutively as *Figure 1, Figure 2,* etc., and include a concise caption placed below the figure in Arial 10-point font. Figures should always be cited in the text (e.g., “as shown in Figure 3”), and each figure must be mentioned before it appears. If a figure contains multiple parts (e.g., a, b, c), label them clearly within the figure and describe each part in the caption.

*1.1.2 How to format Tables*

Tables should also be centered, numbered consecutively as Table 1, Table 2, etc., with captions placed above the table in Arial 10-point font. Avoid vertical lines and keep tables simple. It is advised to cite the table in the text.

*1.1.3 Adding Equations*

Equations should be prepared using a standard equation editor such as Microsoft Equation Editor, MathType, or LaTeX, to ensure consistency and compatibility across submissions. All equations must be centered on the page and numbered consecutively throughout the manuscript. Equation numbers should be aligned to the right margin in parentheses (e.g., (1.1), (2.1), (3.5) etc.

Equations must be cited in the text before they appear, and referenced using the format “as shown in Eq. (2)” or “the relationship is expressed in Equation (2.1)-(2.5).” Each symbol and variable used in an equation should be defined in the text immediately after its first appearance to avoid ambiguity.

1.2 Additional Policies and Submission Checklist

All submitted manuscripts will undergo a strict originality screening process. The conference follows ethical publication practices, and therefore, every manuscript will be checked using Turnitin for plagiarism, including AI-generated content. A similarity index of less than 20% is mandatory for acceptance. Authors must ensure that any figures, tables, or text reproduced or adapted from previously published sources are properly cited, and necessary copyright permissions are obtained from the original publisher. To assist authors in preparing their manuscripts, a submission checklist is provided at the end of this template. The checklist covers essential items such as Title, Abstract, Keywords, Formatting, Figures and Tables, Equations, References, and Conflict of Interest declaration, ensuring that papers meet the required standards before submission.

2. Sample paragraph and text style

Research in the field of clean energy and environmental management has expanded significantly over the past two decades. Various studies have focused on improving energy efficiency, developing renewable energy technologies, and mitigating pollution. With rising global energy demand and climate concerns, the integration of clean energy solutions into mainstream systems has become a central focus of researchers and policymakers (Smith & Brown, 2020). Governments worldwide are setting ambitious targets for carbon neutrality, and industries are increasingly adopting sustainable practices to align with regulatory frameworks and societal expectations.

In parallel, technological progress has enabled innovative solutions in renewable energy generation and pollution control. For example, improvements in materials science and digital monitoring have enhanced the performance of renewable systems, while data-driven approaches have allowed for better optimization of energy distribution (Patel & Mehra, 2021). Smart grids, artificial intelligence, and predictive analytics are now being deployed to ensure more reliable integration of intermittent sources such as solar and wind power. Similarly, advancements in carbon capture technologies and waste-to-energy systems are opening new pathways for reducing environmental footprints.

These developments indicate that both technology and governance must work together to achieve long-term sustainability goals. While technology provides the necessary tools and innovations, effective policy frameworks, financial incentives, and public awareness play a crucial role in their successful adoption. Future research must therefore emphasize interdisciplinary collaboration, addressing not only the technical challenges but also the socio-economic and policy dimensions of clean energy and pollution mitigation.

2.1 Renewable Energy Technologies

Renewable energy is considered a key solution to reducing global dependence on fossil fuels. Solar, wind, and biomass are among the most widely studied sources. The adoption of renewable energy systems has been supported by both policy initiatives and technological advancements [3]. Despite the progress, challenges remain in integrating renewable sources with existing grids. Issues such as intermittency, storage capacity, and transmission losses continue to affect system reliability. Researchers are exploring hybrid systems and smart grid technologies to address these challenges, making renewable energy a more dependable option for large-scale adoption (Zhao & Singh, 2022).

Furthermore, cross-sectoral integration-such as coupling renewable energy with transportation and industrial applications-is gaining attention as a way to maximize efficiency and sustainability. For instance, electric vehicles powered by renewable energy and industrial processes driven by green hydrogen illustrate how renewable systems can transform multiple domains simultaneously. These efforts suggest that the pathway toward a low-carbon future requires not only technological innovation but also coordinated infrastructure planning and global collaboration.

*2.1.1 Solar Energy Systems*

Solar photovoltaic (PV) technology has become increasingly cost-effective due to advances in materials and manufacturing techniques. Studies show that integrating solar systems into urban infrastructure can significantly reduce energy demand from non-renewable sources [(Chen & Kumar, 2019). The overall power output of a solar PV system can be estimated using Equation (2.1).

|  |  |  |
| --- | --- | --- |
|  |  | (2.1) |

Where is the power generated (W), is the panel efficiency, is the panel area , and is the solar irradiance ( ).

In addition to the basic power equation, the energy yield of a PV system over a given time period ttt can be calculated as:

|  |  |  |
| --- | --- | --- |
|  |  | (2.2) |

where is the total energy generated ().

Furthermore, the performance ratio (PR), which indicates the overall quality of a PV system, can be expressed as:

|  |  |  |
| --- | --- | --- |
|  |  | (2.3) |

where is the measured energy output, and is the expected energy based on ideal conditions.

To account for temperature effects on PV efficiency, the temperature-corrected efficiency ​ can be estimated as:

|  |  |  |
| --- | --- | --- |
|  |  | (2.4) |

where ​ is the reference efficiency, is the temperature coefficient, is the operating cell temperature, and is the reference temperature (usually 25°C).

These equations collectively allow researchers and engineers to estimate performance, optimize system design, and compare PV installations under different conditions.

*2.1.2 Wind Energy Applications*

Wind energy has been successfully implemented in both onshore and offshore environments. Modern wind turbines are designed to optimize performance across a range of wind speeds, making them suitable for diverse geographical regions (Hernandez & Rao, 2020). Table 1 compares the average capacity factors of solar, wind, and hydropower plants. Offshore wind farms, in particular, often achieve higher capacity factors due to stronger and more consistent wind resources. Continued innovation in turbine design and grid integration is expected to further enhance the role of wind energy in the global renewable mix.

**Table 1**. Comparison of Average Capacity Factors for Renewable Energy Sources [8].

|  |  |  |  |
| --- | --- | --- | --- |
| Energy Source | Capacity Factor (%) | Typical Range (%) | Lifetime  (Years) |
| Solar PV | 20 | 15–25 | 25–30 |
| Wind | 35 | 25–45 | 20–25 |
| Hydropower | 50 | 40–60 | 50–100 |
| Geothermal | 70 | 60–80 | 30–50 |
| Biomass | 55 | 50–70 | 20–25 |
| CSP (Concentrated Solar Power) | 30 | 25–35 | 25–30 |
| Nuclear (for comparison) | 85 | 80–90 | 40–60 |

The power available from wind can be expressed by Eq. (2):

|  |  |  |
| --- | --- | --- |
|  |  | (2.5) |

where is the air density (), is the swept area of the turbine blades (), and is the wind velocity ().

This cubic relation highlights why small increases in wind speed can lead to significant increases in power generation (World Health Organization, 2022). Figure 1 illustrates the power curve of a typical wind turbine, showing the relationship between wind speed and output power. Figure 2 presents a schematic diagram of a modern horizontal-axis wind turbine, indicating key components such as the rotor, gearbox, and generator. In addition, Figure 3 compares onshore and offshore wind installations, highlighting their respective advantages and challenges. Together, these figures demonstrate the critical technical aspects of wind energy systems and their deployment strategies.

|  |  |
| --- | --- |
|  | Micro-Small-Scale Horizontal Axis Wind Turbine Design and Performance  Analysis for Micro-Grids Applications | SpringerLink |
| **Figure 1.** Power curve of a modern wind turbine. | **Figure 2:** Schematic of a horizontal-axis wind turbine showing major components. |

|  |  |
| --- | --- |
|  | |
| (a) | (b) |
| **Figure 3**. Comparison between onshore and offshore wind installations. | |

2.2 Pollution Mitigation Approaches

Pollution mitigation has become an equally important area of research, particularly in the context of urbanization and industrialization. Strategies range from technological interventions to policy-based initiatives aimed at reducing emissions and waste (Khan, 2018). A common model for estimating pollutant dispersion is the Gaussian plume equation (Eq. 2.5):

|  |  |  |
| --- | --- | --- |
|  |  | (2.6) |

where is the pollutant concentration, is the emission rate, is wind speed, is stack height, and ​ are dispersion parameters (Zhao & Li, 2021).

*2.2.1 Air Pollution Control*

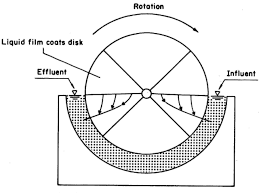
Electrostatic precipitators and catalytic converters have been widely deployed in industries and vehicles. Their performance efficiency is summarized in Table 2, which highlights removal rates for common pollutants (Williams, 2017).

**Table 2.** Efficiency of Selected Air Pollution Control Devices [13].

|  |  |  |
| --- | --- | --- |
| Technology | Pollutant Removed | Efficiency (%) |
| Electrostatic Precipitator | Particulates | 90–99 |
| Catalytic Converter | CO, NOx, Hydrocarbons | 85–95 |
| Fabric Filter | Fine Dust | 95–99 |

*2.2.2 Water Pollution Treatment*

Advanced wastewater treatment plants use chemical, biological, and membrane-based techniques. Figure 3 shows a simplified flow diagram of a wastewater treatment process, highlighting stages of sedimentation, filtration, and disinfection (Miller & Ahmed, 2019).



**Figure 4.** Simplified schematic of a wastewater treatment [14].

2.3 Policy and Regulatory Frameworks

Policy frameworks are equally important in supporting technological interventions. Governments worldwide have introduced incentives such as feed-in tariffs, tax rebates, and renewable portfolio standards (Ministry of New and Renewable Energy, 2021). Table 3 compares renewable energy targets set by selected countries, showing wide variation in ambition and timelines.

Table 3. Renewable Energy Targets by 2030 [16]

|  |  |  |
| --- | --- | --- |
| Country | Target (%) | Policy Instrument |
| Germany | 80 | Feed-in Tariff, Auctions |
| India | 50 | Renewable Energy Mandates |
| USA | 45 | State-level RPS |
| China | 70 | Subsidies, Carbon Trading |

Long-term policy stability is essential for building investor confidence. Countries with consistent renewable policies (e.g., Germany, Denmark) have achieved higher adoption rates, while inconsistent policies have caused delays in project implementation (United Nations Environment Programme, 2022).

3. Results and discussion

The *Results and Discussion* section should present findings clearly and logically, supported by figures, tables, and equations where appropriate. Results must be explained, compared with existing literature, and interpreted in the context of the study objectives. Each figure and table should be cited in the text before being presented. Authors should avoid only describing results and instead highlight their significance, limitations, and implications. This section should connect results to broader research questions and suggest directions for future work.

4. Writing Conclusion

The conclusion should be **concise** and directly address the research objectives stated in the introduction. Authors should summarize the key findings without repeating details already presented in the Results and Discussion. Limitations of the study and potential directions for future work may also be briefly mentioned.

Acknowledgement

The Acknowledgement section should recognize funding sources, supporting institutions, or individuals who contributed to the work but are not listed as authors.

Conflict of Interest

“The authors declare that they have no conflict of interest.”

References

All references must follow the APA (7th edition) style of formatting. The reference list should be arranged alphabetically by the surname of the first author rather than in order of appearance. Each entry must include complete bibliographic details such as author(s), year, title, source, and DOI or URL where available. References should be formatted with a hanging indent and consistency must be maintained throughout the list. Every cited source in the text must appear in the reference list, and uncited works should not be included. Acceptable sources include books, journal articles, conference proceedings, reports, government publications, webpages, and theses. Authors must ensure correct punctuation, italics, capitalization, and citation style.

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**Journal articles:**

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**Conference papers:**

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**Reports / Government publications:**

United Nations Environment Programme. (2022). *Emissions gap report 2022*. United Nations. https://www.unep.org/emissions-gap  
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**Theses / Dissertations:**

Khan, T. (2018). *Optimization of hybrid renewable energy systems in rural areas* (Doctoral dissertation, Indian Institute of Technology Delhi). ProQuest Dissertations and Theses.  
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**Book chapters:**

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