Shortlisting report (PhD and Postdoc) Sustainable Energy sub-program

Background

The call concerns five (5) positions within the sub-program of Sustainable Energy. The positions are three (3) PhDs and two (2) postdocs. The PhD positions were advertised as a third call and thus open to candidates outside UR. For the postdoc positions, it was a second advertisement. There were specific eligibility criteria for each position, and these are listed in the evaluation matrix (please see attached excel file). The two calls are attached to this report.

Members of the shortlisting committee

From UR: Dr. Jean Marie Vianney Bikorimana, Dr. Jean de Dieu Hakizimana, Dr. Samuel Mutarindwa, Dr. Innocent Ndahiriwe, Associate Prof. Hilda Vasantha, Associate Prof. Etienne Ntagwirumugara, and Associate Prof. Charles Kabiri. From Rwanda Polytechnic: Dr. Sylvie Mucyo and Dr. Aimable Nsabimana

From Chalmers: Dr. Jimmy Ehnberg, Dr. Lennart Bångens, and Prof. Erik Ahlgren, Associate Prof. Helene Ahlborg, Prof. Annika Rickne, Prof. Sverker Molander

From Sussex University, UK: Dr Lucy Baker (co-supervisor for position 4)

Meeting agenda

The two shortlisting meetings was held on 16 March 2022 via Chalmers' zoom meeting links. One meeting (**PhD policy finance**, + **Postdoc Renewable Energy** (economics)) started 11am until 12:30pm Kigali time and the second meeting (**PhD solar energy** + combined generation and Postdoc LCA) started 3pm until 5pm, Kigali time.

The teams first discussed the overall situation regarding the calls, number of applicants and academic members who participated in evaluating suitable candidates. The teams then split up into break out groups and discussed candidates in depth. Thereafter, a joint summary and concluding discussion was held, with decisions on candidates to be invited for interviews.

Summary on received applications for the PhD call

PhD positions:

PhD POSITION 1. Scales of solar power for rural development in Rwanda's future energy system

PhD POSITION 2. Combined generation systems – hydro and solar power PhD POSITION 3. The role of policy and finance in energy development in Rwanda

In total, twenty-one (21) applications have been received; nine (9) applications for Position 1, eight (8) for Position 2, and four (4) applications for Position 3.

PhD Position 1: Scales of solar power for rural development in Rwanda's future energy system

- 1. Emmanuel Iradukunda
- 2. Aphrodis Nduwamungu
- 3. Pierre Damien Uwitije
- 4. Hyacinthe Ngwijabagabo
- 5. Charity Kampire
- 6. Vincent Niyigaba
- 7. Ernest Nshimiyimana
- 8. Phocas Nzasingizimana
- 9. Vedaste Ndayishimiye

PhD Position 2 : Combined generation systems - hydro and solar power

- 1. Emmanuel Iradukunda
- 2. Aphrodis Nduwamungu
- 3. Clementine Uwamahoro
- 4. Olivier Ngaboyishema
- 5. Theoneste Nsanzimfura
- 6. Vedaste Ndayishimiye
- 7. Vincent Niyigaba
- 8. Pierre Damien Uwitije

PhD Position 3: The role of policy and finance in energy development in Rwanda

- 1. Theodomir Barifashe
- 2. Emmanuel Niyonshuti
- 3. Anatole Uwiragiye
- 4. Valentine Ayinkamiye

Summary on received applications for the Postdoc call

Postdoc positions:

Postdoc position 1. Renewable energy Postdoc position 2. Sustainable sizing of electric system components

For the postdoc call, only three (3) applications have been received. Two (2) applications for Position 1 and one (1) application for Position 2.

Postdoc position 1: Renewable energy

- 1. Dr. Gace Athanase Dalson
- 2. Dr. Alice Ikuzwe

Postdoc position 2: Sustainable sizing of electric system components

1. Dr. Gace Athanase Dalson

Comment: we note that the number of applicants was much better this round than the previous, at least for PhD positions, and this can be due to: a longer application period, which allowed for more time to learn about the call and apply. We also attracted a few external

applicants from government and private sector, part time staff and newly graduated master students. Six applicants also applied for two positions each, which brought up the number for position 1 and 2. We are somewhat disappointed that we got very few female applicants, despite efforts to spread the call through women in the STEM networks. Only three women applied and one of them didn't send in a complete application. We see the lack of female applicants as a major problem that will require some additional strategies and possibly women-specific calls.

Screening of candidates meeting general eligibility criteria

PhD Position 1. All applicants are judged as eligible. But Charity Kampire's application is not complete

PhD Position 2. All applicants but one are judged as eligible. Mr Iradukunda has not yet completed his MSc degree.

PhD Position 3. All applicants are judged as eligible.

Postdoc Position 1. All applicants are judged as eligible.

Postdoc Position 2. All applicants are judged as eligible.

Table of evaluation

See excel file. This is attached as a separate file to this report. The template is adapted with specific eligibility criteria as per the call for applications.

Outcome of the shortlisting

Name	Decision	Comments
1. Pierre Damien Uwitije	Recommended for the interview	All application documents are provided, Msc thesis matches with the position applied for, some articles related to the topic of the position were published, summary of papers given was ok.
2. Ernest Nshimiyimana	Recommended for the interview	All application documents are provided, Msc thesis matches with the position applied for, however poor grades, lacks previous publications, summary of papers given was good.
3. Clementine Uwamahoro	Recommended for the interview	The candidate applied for position 2, but was shifted to position 1 by initiative from main supervisor. All application documents are provided, relevant background, Msc thesis

PhD Position 1. The following table shows the decision from panel members.Table 1. Recommendation for the interview/PhD position 1

		matches with the position applied for, some articles related to the topic of the position were published, summary of papers given was well done. The only candidate who displays
4. Aphrodis Nduwamungu	Not recommended for the interview	systems thinking. His background is more related to electrical and control not matching with the topic for the position.
5. Emmanuel Iradukunda	Not recommended for the interview	The application not complete.
6. Hyacinthe Ngwijabagabo	Not recommended for the interview	Educational background is not related to the topic for the position applied for.
7. Vedaste Ndayishimiye	Not recommended for the interview	His background is more related to electrical and control not matching with the topic for the position.
8. Phocas Nzasingizimana	Not recommended for the interview	summary of papers given was not well done.
9. Charity Kampire	Not recommended for the interview	Application not complete and lacks relevant background.

The evaluation was done by Dr. Jimmy Ehnberg, Dr. Lennart Bångens, Associate Prof. Etienne Ntagwirumugara, Dr. Jean Marie Vianney Bikorimana, and Prof. Erik Ahlgren. We note here that the candidate ranked 3rd applied for another position, however, she was identified by the main supervisor Prof Ahlgren as a very good candidate, to which the other seniors agreed. Her application was then evaluated against the criteria for position 1. Also, she is the only female applicant for position 1 and 2. It was decided to invite her for interview, given her very relevant background and skills, and the importance of having female applicants. The candidate will be informed and asked if she agrees to be shifted to position 1. All in all, three candidates are recommended for interview.

Tuble 2. Recommendation for the meet (100)/The position 2		
Name	Decision	Comments
1. Olivier Ngaboyishema	Recommended for the	All application documents
	interview	are provided, Msc thesis
		matches with the position
		applied for, some articles
		related to the topic of the
		position were published,
		summary of papers given

PhD Position 2. Table 2 shows the decision from the panel members.		
Table 2. Recommendation for the interview/PhD position 2		

		was very well done.
2. Aphrodis Nduwamungu	Recommended for the interview	All application documents are provided, Msc thesis matches with the position applied for, many articles related to the topic of the position were published, summary of papers given was well done.
3. Pierre Damien Uwitije	Recommended for the interview	All application documents are provided, Msc thesis matches is very well written, some articles were published, summary of papers given was very done. Even if he does not have back ground in electrical engineering from his CV he can update for the topic applied for.
4. Vedaste Ndayishimiye	Recommended for the interview	All application documents are provided, Msc thesis matches with the position applied for, many articles related to the topic of the position were published, summary of papers given was ok.
5. Vincent Niyigaba	Not recommended for interview	Partly relevant background but not very strong.
6. Emmanuel Iradukunda	Not recommended for the interview	The candidate is not yet having his Master degree. Poor literature review
7. Theoneste Nsanzimfura	Not recommended for the interview	The summary of papers is not at a level of a PhD candidate. Not the right background.
8. Clementine Uwamahoro	Not recommended for the interview	Not the right background. Shifted to position 1 by Swedish supervisors.

The evaluation was done by Dr. Jimmy Ehnberg, Prof. Erik Ahlgren, Dr. Jean Marie Vianney Bikorimana, and Associate Prof. Hilda Vasantha.

It is noted that Pierre Damien Uwitije is shortlisted both for position 1 and 2, and he will be evaluated based on his performance in respective interview and for the position-specific criteria. It is also noted that the affiliation for Olivier Ngaboyishema is not clear and this needs to be clarified.

PhD Position 3. The following table shows the recommended candidates for the interview.

- 1. Anatole Uwiragiye
- 2. Theodomir Barifashe
- 3. Emmanuel Niyonshuti
- 4. Valentine Ayinkamiye

Table 3. Recommendation for the interview/PhD position 3
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Name	Decision	Comments
Name 1. Anatole Uwiragiye	Decision Recommended for the interview	All application documents are provided, Msc thesis of good academic quality and degree in relevant topic, although more in environment than energy and policy. Current work experience gives policy insights. Some articles published, summary of papers given was ok. Currently employed by
2. Theodomir Barifashe	Recommended for the interview	government institution All application documents are provided, Msc thesis shows academic qualities, the background (in geography) is partly relevant. Some publications, summary of papers given was ok. More in environment and GIS then energy, policy or finance.
3. Emmanuel Niyonshuti	Not recommended for the interview	All application documents are provided, Msc thesis and background in energy economics, which only partly matches the position. Lacks publications and the written assignment is poorly done. A very good student, strong in econometrics, but lacks qualitative methodological and writing skills. Does not have the profile asked for.
4. Valentine Ayinkamiye	Not recommended for the interview	Application not complete, the written assignment is not the one asked for. Also

	lacks relevant background.

Mrs. Valentine Ayinkamiye is not qualifying for interview and her application lacks the written assignment asked for. It was discussed if Emmanuel Niyonshuti should be invited for interview and the team did not agree on this. The supervisors considered his application again and decided against inviting him given that he would not be suitable for the position as it is currently formulated, and not with the current supervisors.

The two invited candidates are both older than the recommended age and did not provide very strong written assignments but may still be relevant and are therefore invited for interviews.

The evaluation was done by Dr. Jean de Dieu Hakizimana, Dr. Aimable Nsabimana, Dr. Samuel Mutarindwa and Dr. Innocent Ndahiriwe, Associate Prof. Helene Ahlborg (main supervisor), and Dr. Lucy Baker (co-supervisor).

Postdoc Position 1. The ranking is as follows:

1. Dr. Alice Ikuzwe

Dr Ikuzwe has a relevant PhD and the proposal matches the topic well. She is currently employed by EPD, which is considered a strength given the topic. It needs to be confirmed that her employer supports her application for postdoc. Her application came in a few hours late, during the weekend. However, given how hard it is to find any applicants for postdoc this is considered unimportant, since it was well before the next workday. The alternative would be to not have a single qualified candidate for technical reasons, and readvertise, thus causing further delays.

The second candidate Dr. Gace Athanase Dalson is not qualifying for the interview because his PhD topic and experience are not matching with the position applied for, and his proposal does not answer the call.

The evaluation was done by Dr. Lennart Bångens, Prof. Annika Rickne, and Associate Prof. Etienne Ntagwirumugara. Dr. Charles Kabiri and Dr. Sylvie Mucyo attended the meeting but did not evaluate.

Postdoc Position 2. The ranking: The single applicant Dr. Gace Athanase Dalson was evaluated and his application and proposal to conduct LCA on nuclear energy is not considered relevant for the call. It was discussed if the position could be reformulated to better suit the candidate and to suggest to him a different focus. Prof Molander also suggested that prof Ahlgren should take over mentorship for a technoeconomic assessment. It was concluded that the LCA part of the position could be invited for interview. Thereafter, Prof Ahlgren evaluated the application to see if this was a possibility but found the candidate to not qualify for a technoeconomic assessment at the level of postdoc, as he lacks the right background. It was then concluded that he should not be invited. Instead, postdoc position 2 needs to be reformulated and readvertised.

The evaluation is done by Prof. Sverker Molander, Associate Prof. Etienne Ntagwirumugara, Dr. Jimmy Ehnberg, Prof. Erik Ahlgren, and Dr. Lennart Bångens

Summarizing comment:

We have relevant candidates who are to be invited for interviews for position 1-3 for PhD and for postdoc position 1. Postdoc position 2 lacks a relevant candidate and needs to be reformulated.

We have only 2 female candidates for the 4 positions that will be interviewed for, and only one of them is for PhD. This poses a challenge as we may fail to recruit a single female PhD applicant for the sub-program. This is despite the effort to spread the call to women in STEM networks and encourage female applicants. We also note that the external candidates from private/government sector need to show confirmation that they have the support from their employers. This should be done before the interview.

Shortlisted candidate to be invited for interview:

Position 1. Scales of solar power Pierre Damien Uwitije Ernest Nshimiyimana Clementine Uwamahoro

Position 2. Combined generation systems Olivier Ngaboyishema Aphrodis Nduwamungu Pierre Damien Uwitije Vedaste Ndayishimiye

Position 3. The role of policy and finance Anatole Uwiragiye Theodomir Barifashe

Postdoc 1. Renewable Energy Alice Ikuzwe

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Signatures by note taker and meeting chair: Charles Kabiri and Helene Ahlborg