# **Volt-Age Living Labs Evaluation Criteria and Merit Indicators**

During the review process, the review committee assigns a rating to each application. These ratings are used to create a ranked list of applications, which the Volt-Age CFREF uses to allocate funding. Funding is awarded in order of ranking until all available funds are exhausted or no additional applications meet the funding criteria.

The priority-driven peer review mechanism will use a scale of 0.0 to 5.0 to rate applications, with 5.0 being the highest possible rating. Scores are assigned in increments of 0.1 to ensure precision in the evaluation process. Reviewers are encouraged to use the full range of rating scores to accurately reflect the quality and competitiveness of each application. Ratings are assigned qualitative descriptors (see Tables below) to help guide reviewers in their rating of applications. For an application to be eligible for funding, it must receive a score of 3.0 or higher.

#### 1. Living Lab

	Exceptional (4.4 to 5.0)	Exceeds (3.7 to 4.3)	Meets (3.0 to 3.6)	Does not satisfy (<2.9)
1.1 There is a well- established, long-term existing relationship between the community that will host the Living Lab and at least one member of the research team	There is a <b>well-</b> documented, long-term relationship (5+ years) with consistent collaboration and tangible outcomes benefiting both parties.	A <b>strong, long-term</b> <b>relationship</b> (3-5 years) is evident, with regular collaboration and mutual benefits.	A <b>moderate relationship</b> (1-3 years) exists, with periodic collaboration but limited outcomes or engagement.	The relationship is <b>developing</b> , with minimal collaboration or interaction over less than one year.
1.2 There have been past and/or are ongoing partnership activities between the core research team and the community that will host the Living Lab.	There is clear evidence of significant past and ongoing partnership activities, including joint projects with measurable outcomes and sustained collaboration.	There is evidence of regular partnership activities, with ongoing or recent collaboration leading to meaningful engagement.	There is evidence of <b>some</b> <b>partnership activities</b> , but they are limited in scope, frequency, or impact.	There is <b>minimal or no</b> <b>evidence</b> of partnership activities, with sporadic or informal interactions between the research team and community.
1.3 The Living Lab host's goals, needs, and priorities relate to the theme of electrification	The Living Lab host's goals, needs, and priorities <b>fully</b> <b>align</b> with the electrification theme, demonstrating clear, direct, and tangible connections.	The host's goals, needs, and priorities show <b>strong</b> <b>alignment</b> with electrification, with several relevant and concrete connections.	The host's goals, needs, and priorities exhibit <b>moderate alignment</b> with electrification, with some relevant but less direct connections.	The host's goals, needs, and priorities display <b>limited alignment</b> with electrification, with only minor or vague connections.
1.4 The Living Lab host is open to including multiple	The host demonstrates exceptional openness, actively seeking and	The host shows <b>strong</b> <b>openness</b> , engaging multiple stakeholders and	The host exhibits <b>moderate openness</b> , including some	The host shows <b>minimal or</b> <b>no openness</b> , with only a few stakeholders

and diverse stakeholders	including diverse	partners with a clear	stakeholders and partners,	considered and limited
and partners	stakeholders and partners	intention to foster diversity.	but diversity efforts are	diversity in representation.
	in all stages of the project.		limited.	
1.5 The Living Lab host is	The host demonstrates full	The host shows <b>strong</b>	The host exhibits	The host shows minimal or
prepared to establish a	preparedness, with clear	preparedness, with most	moderate preparedness,	no preparedness, with
Living Lab, including	plans, resources, and	plans and resources in	with partial plans and some	limited plans, resources, or
supporting the engagement	commitments to engage	place, and a clear strategy	resources identified but	strategies for stakeholder
of stakeholders and the	stakeholders and develop	for stakeholder	lacking full clarity or	engagement and
development of	necessary infrastructure.	engagement and	commitment.	infrastructure
infrastructure		infrastructure.		development.

## 2. Alignment

	Exceptional (4.4 to 5.0)	Exceeds (3.7 to 4.3)	Meets (3.0 to 3.6)	Does not satisfy (<2.9)
2.1 Alignment with Volt-Age Themes and Platforms.	The proposed project connects with <b>three or</b> <b>more</b> Volt-Age themes and/or platforms.	The proposed project connects with <b>two</b> Volt-Age themes and/or platforms.	The proposed project connects with only <b>one</b> Volt-Age theme or platform.	The proposed project does not align any Volt-Age themes or platforms.
2.2 Breadth of the research areas involved in the proposed research project.	The proposed project involves <b>three or more</b> research areas and includes <b>at least one</b> Social Sciences/ Humanities field.	The proposed project involves <b>three or more</b> research areas but does not include any Social Sciences/ Humanities fields.	The proposed project involves <b>two to three</b> research areas.	The proposed project only involves one research area.

## 3. Background and Outcomes

	Exceptional (4.4 to 5.0)	Exceeds (3.7 to 4.3)	Meets (3.0 to 3.6)	Does not satisfy (<2.9)
3.1 Significance of the impacts of the intended outcomes on decarbonization and electrification initiatives as well as on social, economic, and/or environmental well-being in Canada.	The proposed outcomes are of <b>exceptional</b> <b>importance</b> to Canada and may also be important <b>internationally</b> . This research will <b>overcome</b> knowledge gaps to develop new and innovative policies, standards, products, services, processes, or technologies in Canada. The expected outcomes and impacts will be of the <b>highest impact</b>	The proposed outcomes are very important to Canada. This research will address knowledge gaps to develop new and innovative policies, standards, products, services, processes, or technologies in Canada. The expected outcomes will have high impact for Canadians.	The proposed outcomes are <b>important</b> to Canada. This research will <b>contribute to</b> addressing knowledge gaps to develop new and innovative policies, standards, products, services, processes, or technologies in Canada. The expected outcomes will have <b>impact</b> for Canadians.	The proposal does not adequately establish why the topic is important to Canada. It does not sufficiently identify how the research will address knowledge gaps related to developing new and innovative policies, standards, products, services, processes, or technologies. It does not adequately identify how outcomes will have impact
3.2 Originality of the research to address the topic and the potential for generating new scientific knowledge.	for Canadians. The proposal demonstrates that the topic will be addressed through <b>exceptionally innovative</b> research. The research has <b>potential to contribute to</b> <b>a scientific breakthrough</b> .	The proposal demonstrates that the topic will be addressed through <b>highly</b> <b>original</b> research. The research has <b>potential for</b> <b>a significant advance in</b> <b>the field</b> .	The proposal demonstrates that the topic will be addressed through original research. The research includes some concepts or directions that may lead to an advance in the field.	for Canadians. The proposal does not sufficiently demonstrate that the topic will be addressed through original research or is not well positioned within the state- or-the-art. It is not clear how the research will lead to new concepts or directions.
3.3 Contextualization of proposed project within other initiatives led by researchers and partners.	The proposed project has <b>significant</b> connections to other initiatives led by researchers, partner organizations, and relevant research efforts in Canada. The proposed outcomes have <b>exceptional</b> complementarity with the	The proposed project has <b>highly important</b> connections to other initiatives led by researchers, partner organizations, and relevant research efforts in Canada. The proposed outcomes have <b>significant</b>	The proposed project has <b>important</b> connections to other initiatives led by researchers, partner organizations, and relevant research efforts in Canada. The proposed outcomes have <b>some</b> complementarity with the	The proposed project does not adequately establish connections to other initiatives led by researchers, partner organizations, and relevant research efforts in Canada. The complementarity with

	other existing research	complementarity with the	other existing research	the other existing research
	support.	other existing research	support.	support is unclear.
		support.		
3.4 Extent to which the	A comprehensive strategy	A clearly defined strategy	A strategy <b>may lead</b> the	The strategy to translate
strategy to apply the	indicates how the partners	indicates how the partners	partners to translating the	the research results into
research outcomes is likely	will translate the research	will translate the research	research results into	application is not
to achieve the intended	results into application,	results into application,	application, such that the	convincingly presented,
outcomes.	such that the outcomes	such that the outcomes	outcomes and impacts	such that the outcomes
	and impacts are very likely	and impacts are <b>likely</b> to	may happen.	and impacts are unlikely to
	to happen.	happen.		happen.

## 4. Partnerships

	Exceptional (4.4 to 5.0)	Exceeds (3.7 to 4.3)	Meets (3.0 to 3.6)	Does not satisfy (<2.9)
4.1 Appropriateness of the	The proposed outcomes	The proposed outcomes	The proposed outcomes	The outcomes are not
partnerships to achieve the	are <b>highly relevant</b> to the	are <b>relevant</b> to the	are <b>related</b> to the partners'	sufficiently related to the
intended outcomes.	partners' activities, and it is	partners' activities, and it is	activities, and partnerships	partners' activities, and it is
	very likely that	likely that partnerships will	may contribute to planned	not clearly established that
	partnerships will contribute	contribute to planned	outcomes being achieved.	partnerships will contribute
	to planned outcomes being	outcomes being achieved.		to planned outcomes being
	achieved.			achieved.
4.2 Leveraging and	The proposal demonstrates	The proposal demonstrates	The proposal demonstrates	Not all participants needed
inclusion of different types	a <b>strong synergy</b> among	synergy among the	complementarity among	to achieve the planned
of partnerships and the	the participants and	participants and includes a	the participants and	outcomes are present. The
integration of their unique	includes a <b>comprehensive</b>	combination of	includes <b>a variety</b> of	proposal does not
perspectives and	combination of	perspectives and	perspectives and	demonstrate synergy or
knowledge in the project.	perspectives and	knowledge.	knowledge.	complementarity.
	knowledge.			
4.3 Clarity of partners'	Each partner plays an	Each partner plays a	Each partner plays an	Not all partners play an
roles in defining the	essential role in the	valuable role in the	active role in the research	active role in the research
research challenge, co-	research effort and	research effort and	effort and demonstrates	effort or demonstrate the
designing and	demonstrates a high level	demonstrates the capacity	<b>some level of capacity</b> to	capacity to achieve the
implementing the research	of capacity to achieve the	required to achieve the	achieve the desired	desired outcomes.
and using results to	desired outcomes.	desired outcomes.	outcomes.	
achieve the outcomes.				
4.4 Appropriateness of the	The contributions <b>enrich</b>	The contributions <b>increase</b>	The contributions are	The contributions are not
level of cash and in-kind	the scope of the project	the scope of the project	suitable for the scope of	suitable for the scope of
contributions from each	and are <b>highly</b>	and are <b>commensurate</b>	the project and are	the project or are not
partner.	commensurate with the	with the partner's role with	somewhat	sufficiently commensurate
	partner's role and with their	their anticipated benefits.	commensurate with the	with the partner's role and
	anticipated benefits.		partner's role and with their	with their anticipated
			anticipated benefits.	benefits.

#### 5. Research Plan

	Exceptional (4.4 to 5.0)	Exceeds (3.7 to 4.3)	Meets (3.0 to 3.6)	Does not satisfy (<2.9)
5.1 Clarity of the objectives and deliverables; appropriateness of the scope and size of planned activities to achieve the expected outcomes; justification for the planned expenditures.	The objectives and the deliverables are <b>clear and</b> <b>comprehensive.</b> The planned activities are <b>highly likely</b> to achieve the objectives and expected outcomes. The expenditures are <b>clearly</b> <b>aligned</b> with the activities and are <b>justified</b> .	The objectives and the deliverables are <b>clearly</b> <b>defined</b> . The planned activities are <b>likely</b> to achieve the objectives and expected outcomes. The expenditures are <b>aligned</b> with the activities and are <b>justified</b> .	The objectives and the deliverables <b>are defined</b> . The planned activities are <b>somewhat likely</b> to achieve the objectives and the expected outcomes. The expenditures are <b>reasonably aligned</b> with the activities and are justified.	The objectives and deliverables are not adequately defined or the planned activities are not appropriate to achieve the objectives and expected outcomes. The expenditures are not adequately aligned with the activities and/or are not adequately justified.
5.2 Appropriateness of the identified indicators and methods for monitoring progress during the project and for assessing outcomes after the project.	Indicators and methods are <b>clearly defined</b> and <b>highly effective</b> for monitoring progress and assessing outcomes.	Indicators and methods are <b>well-defined</b> and <b>effective</b> for monitoring progress and assessing outcomes.	Some indicators and methods for monitoring progress and assessing outcomes are proposed and appropriate.	Indicators and methods for monitoring progress and assessing outcomes are not adequately defined or are not appropriate.
5.3 Application of Equity, Diversity, and Inclusion principles and values in the research design.	The proposal demonstrates a <b>clearly</b> <b>defined and</b> <b>comprehensive</b> plan for the inclusion of EDI principles and values throughout the research process.	The proposal demonstrates a <b>well-defined</b> plan for the inclusion of EDI principles and values throughout the research process.	The proposal demonstrates a <b>partial</b> plan for the inclusion of EDI principles and values in some aspects of the research process.	The proposal does not adequately establish a plan to include EDI principles and values in the research process.
5.4 Completeness of the data management plan throughout the data life cycle; appropriateness of the scope and inclusion of data sharing policies and ethical issues relating to partners.	An <b>extensive</b> data management plan is included in the proposal that addresses <b>all stages</b> <b>of the data life cycle</b> . The proposal includes <b>strong</b> data sharing policies and addresses <b>all essential</b>	A <b>clear</b> data management plan is included in the proposal that addresses <b>all</b> <b>stages of the data life</b> <b>cycle</b> . The proposal includes well-defined data sharing policies and addresses <b>most essential</b>	A suitable data management plan is included in the proposal that addresses some stages of the data life cycle. The proposal includes data sharing policies and addresses	The data management plan is not adequately defined. The proposal does not address necessary ethical issues and does not include data sharing policies.

	ethical issues relating to	ethical issues relating to	some essential ethical	
	partners.	partners.	issues relating to partners.	
5.5 Extent and breath of the	The proposal includes	The proposal includes a	The proposal includes a	The knowledge
knowledge mobilization	comprehensive	combination of knowledge	variety of knowledge	mobilization plan does not
plan to contribute to public	knowledge mobilization	mobilization activities	mobilization activities	reach a diverse set of
and institutional bodies of	activities targeted at	targeted at diverse	targeted at <b>relevant</b>	audiences and does not
knowledge.	highly diverse audiences,	audiences, which make it	audiences, which make it	adequately demonstrate
	which make it <b>very likely</b>	likely that the outcomes	possible that the	that the outcomes will
	that the outcomes will	will contribute to the public	outcomes will contribute to	contribute to public and
	contribute to the public	and institutional bodies of	the public and institutional	institutional bodies of
	and institutional bodies of	knowledge.	bodies of knowledge.	knowledge.
	knowledge.			

## 6. Team & Project Management

	Exceptional (4.4 to 5.0)	Exceeds (3.7 to 4.3)	Meets (3.0 to 3.6)	Does not satisfy (<2.9)
6.1 Appropriateness of the contributions and roles of the research team to achieve the intended outcomes.	The proposed outcomes are <b>highly relevant</b> to the applicants' activities and the proposed contributions and roles <b>strongly support</b> <b>the achievement</b> of the intended outcomes.	The proposed outcomes are <b>relevant</b> to the applicants' activities and the proposed contributions and roles <b>support</b> the achievement of the intended outcomes.	The proposed outcomes are <b>somewhat relevant</b> to the applicants' activities and the proposed contributions and roles <b>may lead to the</b> <b>achievement</b> of the intended outcomes.	The outcomes are not sufficiently related to the applicants' activities, and it is not clearly established that the proposed contributions and roles will lead to the outcomes being achieved.
6.2 Diversity of the research team; interdisciplinarity in the project; inclusion of Equity, Diversity, and Inclusion principles and values.	The proposal demonstrates a <b>strong synergy</b> among the applicants and includes a <b>comprehensive</b> <b>combination</b> of fields of study and career stages that makes it <b>very likely</b> that planned outcomes will be achieved. The inclusion of EDI principles and values are an <b>essential</b> <b>part</b> of the composition of the research team.	The proposal demonstrates synergy among the applicants and includes a varied combination of fields of study and career stages that makes it likely that planned outcomes will be achieved. The inclusion of EDI principles and values are an important part of the composition of the research team.	The proposal demonstrates <b>complementarity</b> among the applicants and includes a <b>combination</b> of fields of study and career stages that <b>may lead</b> to the planned outcomes being achieved. The inclusion of EDI principles and values are a <b>part</b> of the composition of the research team.	Not all applicants and fields of study are needed to achieve the planned outcomes are present. The proposal does not demonstrate a synergy or complementarity that will lead to the outcomes being achieved. The composition of the research team does not adequately include EDI principles and values.
6.3 Clarity of applicants' roles and responsibilities in decision-making and implementing the research.	Each applicant plays an essential role in the research effort and demonstrates a high level of capacity to contribute to the decision-making and implementation of the research.	Each applicant plays a valuable role in the research effort and demonstrates the capacity required to contribute to the decision-making and implementation of the research.	Each applicant plays an active role in the research effort and demonstrates some level of capacity to contribute to the decision- making and implementation of the research.	Not all applicants play an active role in the research effort or demonstrate the capacity to contribute to the decision-making and implementation of the research.
6.4 Appropriateness of academic researcher's expertise, and that found with the partners, both for	The collective expertise of the participants is <b>highly</b> <b>appropriate</b> to successfully carry out the	The collective expertise of the participants is <b>appropriate</b> to carry out the activities. The principal	The collective expertise of the participants is <b>sufficient</b> to carry out the activities. The principal	The application does not adequately demonstrate that the participants have the collective expertise

carrying out the planned	activities. The principal	investigator has the	investigator has largely	needed to carry out the
research activities and in	investigator has	capabilities to manage the	demonstrated the	research and/or the
mentoring trainees.	exceptional capabilities	project, having <b>managed</b>	capabilities to manage the	capacity to manage the
	to manage the project,	similar projects in the past	project.	project.
	having <b>successfully</b>	or has demonstrated the		
	managed similar projects	potential to do so.		
	in the past or has <b>clearly</b>			
	demonstrated the			
	potential to do so.			
6.5 Transparent and ethical	The proposal demonstrates	The proposal demonstrates	The proposal demonstrates	The proposal does not
management of project	a <b>comprehensive</b> strategy	a <b>clear</b> strategy to ensure	a <b>suitable</b> strategy to	adequately demonstrate
initiatives and goals;	to ensure that the research	that the research initiatives	ensure that the research	that the research initiatives
involvement of partners in	initiatives and goals are	and goals are managed	initiatives and goals are	and goals will be managed
project management.	managed transparently and	transparently and ethically.	managed transparently and	transparently and ethically.
	ethically. Partners play an	Partners play a <b>valuable</b>	ethically. Partners play an	The role of partners in the
	essential role in the	role in the management	active role in the	management and direction
	management and direction	and direction of the	management and direction	of the project is not clear.
	of the project.	project.	of the project.	

#### 7. Research Trainees

	Exceptional (4.4 to 5.0)	Exceeds (3.7 to 4.3)	Meets (3.0 to 3.6)	Does not satisfy (<2.9)
7.1 Opportunities for enriched learning experiences for research trainees (students and postdoctoral fellows) to develop relevant research skills as well as professional skills such as leadership, communication, collaboration, and entrepreneurship.	Through an <b>exemplary</b> <b>environment</b> or <b>cutting-</b> <b>edge approach</b> , the project will provide an enriched training experience that leads to <b>innovative and valuable</b> skills appropriate to all levels of trainees.	Through a <b>high-quality</b> <b>environment</b> or <b>approach</b> , the project will provide a training experience that leads to <b>valuable</b> skills appropriate to all levels of trainees.	The project will provide a training experience that leads to <b>relevant</b> skills appropriate to all levels of trainees.	The proposal does not adequately establish that the project will provide an enriched experience for research trainees. The opportunity to develop relevant skills is not sufficiently described.
7.2 Consideration of Equity, Diversity, and Inclusion principles and values in the opportunities for research trainees.	The proposal outlines learning and enrichment opportunities for research trainees with <b>innovative</b> <b>practices</b> that support EDI principles and values.	The proposal outlines learning and enrichment opportunities for research trainees with <b>advanced</b> <b>practices</b> that support EDI principles and values.	The proposal outlines learning and enrichment opportunities for research trainees with <b>practices</b> <b>that consider</b> EDI principles and values.	The application does not adequately outline that EDI principles and values have been taken into consideration within the learning and enrichment opportunities for research trainees.

### 8. Impacts

	Exceptional (4.4 to 5.0)	Exceeds (3.7 to 4.3)	Meets (3.0 to 3.6)	Does not satisfy (<2.9)
8.1 Sustainability	Through an <b>exemplary</b> <b>environment</b> or <b>cutting-</b> <b>edge approach</b> , the project will provide an enriched training experience that leads to <b>innovative and valuable</b> skills appropriate to all levels of trainees.	Through a <b>high-quality</b> environment or approach, the project will provide a training experience that leads to <b>valuable</b> skills appropriate to all levels of trainees.	The project will provide a training experience that leads to <b>relevant</b> skills appropriate to all levels of trainees.	The proposal does not adequately establish that the project will provide an enriched experience for research trainees. The opportunity to develop relevant skills is not sufficiently described.

8.2 Resilience	The proposal outlines	The proposal outlines	The proposal outlines	The application does not
	learning and enrichment	learning and enrichment	learning and enrichment	adequately outline that EDI
	opportunities for research	opportunities for research	opportunities for research	principles and values have
	trainees with innovative	trainees with advanced	trainees with practices	been taken into
	practices that support EDI	practices that support EDI	that consider EDI	consideration within the
	principles and values.	principles and values.	principles and values.	learning and enrichment
				opportunities for research
				trainees.