

Task 6: HELIX Operating Framework Governance Structure and Operational Plan

September 5, 2017

Governance Approach Overview

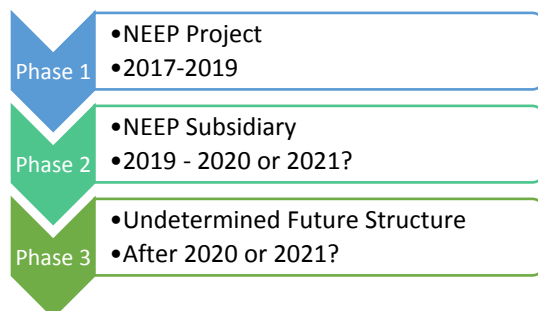
The HELIX Governance Team is of the opinion that, at this time in the development of HELIX, it would be premature to decide on the eventual structure, ownership model, financial arrangements and succession plan for HELIX. Given that the program is in its infancy, we need more time and experience to address the many unknowns before recommending a well-informed proposal for governance structure and an operation plan. Once HELIX has been piloted, additional conversations with interested parties have been undertaken, and possible financial models have been vetted, there will be more information available to make a firm recommendation. In the meantime, the Governance Team recommends the following approach:

- Proceed with the implementation of the HELIX project as planned through at least the grant period (December 2018), while considering a no-cost DOE grant extension if necessary to complete testing and prove viability;
- Establish and operate HELIX as a project of NEEP and then transition HELIX into a NEEP subsidiary until the database can establish financial viability determined, and
- In the process, gain valuable experience operating the HELIX as a subsidiary to determine the best viable ownership, governance, operational and financial business model arrangement in the future before making any final decision to spin off HELIX from NEEP.

Based on this approach, the Governance Team recommends a three-phase approach, including the following phases:

1. Phase 1: HELIX as a Project of NEEP until end of U.S. DOE grant, Dec. 2018, or June 2019 with an extension of the grant
2. Phase 2: HELIX as a Subsidiary of NEEP, with the transition to a subsidiary starting during 2019
3. Phase 3: Undetermined Future HELIX Structure, but likely after 2020 or 2021

FIGURE 1. HELIX PHASES



This memo summarizes the current governance and operations arrangement, outlines the subsidiary structure and elements and begins to ask questions about the ultimate structure for HELIX. As the HELIX project matures, we will need to add and attempt to answer questions and fill in the blanks that will help us address the question of the ultimate HELIX governance structure and operational arrangement.

Subtask 6.1 – HELIX Governance and Ownership Structure

The background for the HELIX governance and ownership structure elements come out of the [series of memos](#) researched and written by the Vermont Law School. . This material was used to inform the HELIX Governance Team’s discussions and proposal to stage HELIX governance and operations through its project, subsidiary and ultimate spin-off structure phases, as discussed above.

The HELIX governance structure presented below provides framework details for the “Project Phase” and “Subsidiary Phase” of HELIX. We expect that experience gained through each of these initial transitional phases will then inform what the ultimate spin-off structure looks like. Until we gain more operational experience, we think it is premature to frame out what the ultimate structure will look like. However, to help think about those ultimate governance elements, we have included an initial set of questions that should be added to as HELIX evolves. The Governance Team will continue to follow the progress of HELIX and update these recommendations in the future. Eventually, the Governance Team and NEEP staff under direction of the NEEP Board will make the final approvals of the governance structure and operating procedures outlined below and developed in Task 11.

HELIX Governance Structure

#	Element	Description/Notes
Phase 1: HELIX Project		
1	Structure	<ul style="list-style-type: none"> • Grant-supported project of NEEP
2	Grant Awarder	<ul style="list-style-type: none"> • U.S. DOE • Ultimate project oversight • State of Vermont (Public Service Department, or PSD) is HELIX grantee, and answers to DOE • The NEEP Board of Directors answers to the PSD for the HELIX project • NEEP staff answer to NEEP Board of Directors
3	NEEP Board of Directors	<ul style="list-style-type: none"> • Authority over HELIX project (during both the Project and Subsidiary Phases) until such time in the future when HELIX is ready to spin off and become a financially viable, self-sustaining entity • Seeks guidance and direction from Advisory Committee
4	HELIX Advisory Committee	<ul style="list-style-type: none"> • Advisory and consultative resource to the project • Information sharing & coordination • Supports NEEP Board of Directors with project advice and consultation until HELIX Subsidiary with its own Board of Directors is formed • May continue to advise the HELIX Subsidiary Board of Directors as well as the ultimate entity, depending on the makeup and interest from these future entities and composition of the groups • May be drawn from to form Subsidiary Board of Directors • Members: <ul style="list-style-type: none"> ○ State Energy Offices ○ Utilities/Program Administrators ○ MLS Systems

#	Element	Description/Notes
		<ul style="list-style-type: none"> ○ Local/state Realtors ○ National Association of Realtors ○ Local/state appraisers ○ Appraisal Institute ○ Data Aggregators (not currently, but should consider adding)
5	Staff/Consultants	<ul style="list-style-type: none"> ● NEEP staff ultimately responsible for oversight of grant deliverables to U.S. DOE ● Vermont Department of Public Service ● Vermont Energy Investment Corp ● Energy Futures Group ● Sustainable Real Estate Consulting Services ● VermontWise Energy Services ● Vermont Law School ● A3P Strategies ● Clearly Energy
6	Partners/Stakeholders	<ul style="list-style-type: none"> ● State Energy Offices ● NASEO ● U.S. DOE ● CSRA (DOE consultants) ● MLS Systems ● Realtors ● Appraisers ● Data Aggregators ● Software Providers ● Clean Energy Advocates
Phase 2: HELIX Subsidiary		
7	Organizational Structure	<ul style="list-style-type: none"> ● Subsidiary of NEEP (the “Parent”) ● Owned in whole by NEEP ● As the parent of the subsidiary, the NEEP Board has the ultimate responsibility and authority; if they have power to create subsidiary, then they have the power to spin off. ● As an entity formed with federal funding, the structure must comply with any federal rules pertaining to products created with federal funds ● 501(c)3 non-profit, following NEEP’s status ● Maintaining non-profit status provides multiple benefits as outlined by Vermont Law School in 4/6/17 Task 4.5 Memo
8	Subsidiary Elements	<ul style="list-style-type: none"> ● Furthers the Parent’s non-profit purposes and mission ● Related business activity, consistent with Parent’s purpose ● Subsidiary benefits from Parent’s non-profit status (i.e., not subject to federal income tax)

#	Element	Description/Notes
		<ul style="list-style-type: none"> • With separate Boards of Directors, both the Parent’s and Subsidiary’s Boards can be protected from debts and liability, with proper corporate separateness established • Subsidiary can attract separate grants and contributions that the Parent cannot • NEEP can financial supporting the subsidiary and associated operational costs, legal fees, sales and marketing, IT costs, etc., and will need to determine adequate funding. • Subsidiary’s staff and board can have separate expertise from Parent’s staff and board • Can ease future transferring of ownership to employees or another party • Parent approves Articles of Incorporation and Bylaws and any future amendments • Parent appoints Subsidiary Board of Directors and has right to remove any without cause at any time • Parent and Subsidiary maintain separate books, accounts, minutes, tax returns, etc. • Staff can be shared between Parent and Subsidy • Net earnings from Subsidiary can be transferred to the Parent as a contribution • Parent can provide management, administration, accounting and staffing services to Subsidiary at cost or less • Parent can make contributions to Subsidiary as debt that can be forgiven later if desired • Based on http://ww1.insightcced.org/uploads/publications/legal/720.pdf
9	HELIX Subsidiary Board of Directors	<ul style="list-style-type: none"> • Appointed by the NEEP Board of Directors • Should be separate individuals from NEEP Board who have specific expertise that can benefit HELIX • Reports to NEEP Board of Directors • Oversees management and financial oversight of HELIX Database and operations • Possibly comprised of representative sample of the following categories, many of which could be overlapping from the current Advisory Committee: <ul style="list-style-type: none"> ○ NEEP ○ States ○ MLS Systems ○ Data Aggregator ○ Utility/Program Administrator ○ Realtors ○ Appraiser ○ Lender ○ At-Large • Number of seats for each representative class to be determined

#	Element	Description/Notes
		<ul style="list-style-type: none"> • Equal votes per Board member • Need to establish conflict of interest provisions
10	HELIX Subsidiary Board Role	<ul style="list-style-type: none"> • Primary role is to oversee HELIX operations with a financial and strategic perspective and to determine the ultimate ownership and structure of the HELIX database • Creates vision and mission • Sets policy direction and ensures procedures are in place • Determines membership classes and any associated fees • Will consider other possible initiatives for the subsidiary • As needed, committees will help carry out the activities of the organization • In order to manage the HELIX Database, the Board will either: <ul style="list-style-type: none"> 1. Hire an Executive Director or Manager; or 2. Contract with a data aggregation or other firm. • The Executive Director or partner firm is given a clear scope and role as well as limits about what she/he can undertake while answering to the HELIX Board of Directors • Hires and fires Executive Director or firm • Maintains ownership of HELIX Database and related assets • Recommends if/when to spinoff, dissolve, or sell HELIX and its assets
11	HELIX Membership	<ul style="list-style-type: none"> • Open to any entity providing HELIX services, using HELIX or supporting the existence of HELIX • Membership Classes: <ul style="list-style-type: none"> ○ HELIX Providers ○ HELIX Users ○ HELIX Supporters • Annual membership fee, varies by class • Provides access to HELIX • Benefits of membership: <ul style="list-style-type: none"> ○ HELIX access ○ Discounted user fees ○ Vote for Board representative ○ Eligibility to run for Board seat
12	Executive Director or Manager	<ul style="list-style-type: none"> • Executive Director/Manager is hired/fired by the HELIX Board • Serves at the pleasure of the HELIX Board to carry out their vision, mission, policy direction and procedures guidance • Hires and fires staff and consultants • Manages all staff and the day-to-day operation of HELIX
13	Data Aggregation Firm	<ul style="list-style-type: none"> • Selected by the Board or Executive Director • Contract arrangement to operate the HELIX database • Performance-based arrangement in order to maintain relationship
14	Staff	<ul style="list-style-type: none"> • Hired and fired by Executive Director • Answer to the Executive Director

FIGURE 2. PROJECT GOVERNANCE STRUCTURE

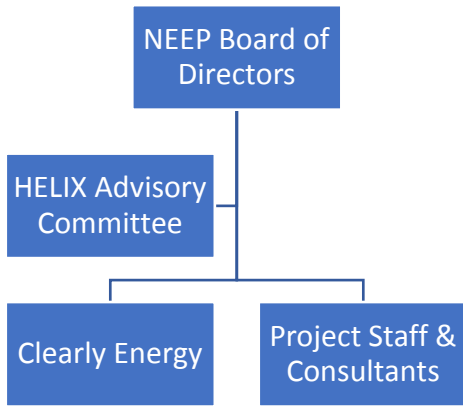
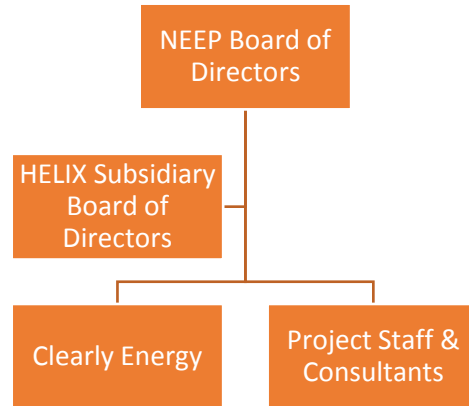


FIGURE 3. SUBSIDIARY GOVERNANCE STRUCTURE



HELIX Ownership Structure

The proposed ownership structure of HELIX for each of the three phases is presented below, along with some key questions that will need to be addressed as HELIX moves through its ownership phases.

#	Timeframe	Description/Notes	Key Questions
Phase 1: HELIX Project			
Phase 1	2017-2019	<ul style="list-style-type: none"> During the term of the DOE award, NEEP will retain ownership rights and oversight 	<ol style="list-style-type: none"> How does HELIX relate to other energy auto-pop efforts currently under development (e.g., Pivotal in N. Carolina, LBNL's PV Auto-Pop, California's efforts, etc.)? What is the interest that data aggregators have in HELIX? <ol style="list-style-type: none"> Data access Partnership Financial Ownership What are other possible revenue models for HELIX and other sources of revenue? How much will HELIX cost to run and what is the capital needed? Task in work plan. Develop business plan/budget in Q3 2018. Can we include eventual customers as beta testers?
Phase 2: HELIX Subsidiary			
Phase 2	2019-2020?	<ul style="list-style-type: none"> As HELIX becomes more independent and the future development becomes clearer, HELIX is setup as a wholly-owned subsidiary of NEEP The ultimate structure post-NEEP will need to be determined before spinning off. Need to ensure HELIX is self-sufficient and financially viable before spun off. 	<ol style="list-style-type: none"> How can we best determine the value of HELIX in the real estate marketplace and by jurisdictions with an interest in promoting energy information? <ol style="list-style-type: none"> What might they be willing to pay for this data? When HELIX is spun off, what other products or services can it provide to benefit the customer base that it has developed and further its mission impact? What are the operational costs? What are our break-even costs? Parse out total costs, per customer costs, data point costs...? (Q1 2018 start figuring out). Design, develop and figure out how to pay for HELIX and reach out to potential customers/funders; who are our potential clients If HELIX isn't making money by end of grant period, then how long is NEEP willing to keep subsidizing? Is the expectation that HELIX will be financially self-sufficient by the end of the award? If so, there should be a written plan for getting to that point. If not, there should be a written plan for contingencies.

			<ol style="list-style-type: none"> 7. What is the revenue model if HELIX is not self-sufficient at end of grant period or can't find another funding source? 8. What happens if there is no future viability? Wind-down procedure, disposition of data that had been collected? How far to get into contingency details?
Phase 3: Undetermined Ultimate HELIX Structure			
Phase 3	Post-2020?	<ul style="list-style-type: none"> • Timing and structure to be determined by HELIX Subsidiary Board of Directors, then approved by NEEP Board of Directors • Premature to determine timing and ultimate structure at this point • In order to avoid future potential conflict, the NEEP Board should make a statement early on of its intention to spin HELIX off at the advice of the HELIX Board. This could become particularly important if/when HELIX starts to make money. 	<ol style="list-style-type: none"> 1. When is the right time to ultimately spin off HELIX from NEEP? 2. What organizations and ultimately who is interested in HELIX? What benefits do they derive? How much might they pay for this product/service?

Subtask 6.2 – HELIX Operational Plan

The Operational Plan should be developed as the HELIX Database is field-tested and decisions are made about who will ultimately own and implement the system in the field post-NEEP. If HELIX is to be operated by a data aggregation firm, operations should follow their existing arrangements and procedures. If HELIX is going to be maintained by staff of a new non-profit organization, an entire new operational plan and model will need to be developed. The Operational Plan shall remain a work in progress until HELIX is more fully developed.

HELIX Operational Plan

#	Element	Description/Notes
Phase 1: HELIX Project		
1	Revenue Model	<ul style="list-style-type: none"> • Pilot operations and test procedures • Avoid charging during project phase until HELIX works and value is proven • Maintaining non-profit status will allow for receiving grants and general support in the future, if needed • Need to understand the value HELIX brings to the market and stakeholders to determine the best revenue model. The operations plan will help create independence and determine how to proceed
2	Members	<ul style="list-style-type: none"> • Explore interest in users becoming members of HELIX <ul style="list-style-type: none"> ◦ If interest, could offer a free membership to utilities, states and others who choose to support the existence of HELIX
3	Populating the Database with Data	<ul style="list-style-type: none"> • Responsibility of ClearlyEnergy initially • While the HELIX structure will be initially established and populated, in order to maintain the value of the HELIX Database, arrangements to ensure timely, clean and accurate energy data will be paramount • Data consistency and privacy provisions will need to be established and maintained for each state • When a new score is entered into the database for a specific address that already has a score on file, the old score will need to be archived. Users should be able to access archived scores to see improvements made over time by address.
4	Reporting	<ul style="list-style-type: none"> • Regular reports on data in/out/used to the HELIX team, advisory committee, NEEP Board and others
Phase 2: HELIX Subsidiary		
5	Revenue Model	<ul style="list-style-type: none"> • Limit charging fees until HELIX operations and the value of its data is proven • Consider offering basic data values for free (e.g. HEScore) but then charge for access to the more detailed data (e.g., certifications or estimated annual energy use) or consider scaling per user or by the amount of data entered. Answer in early 2018, post-pilot testing. • Explore charging for support, membership and use

		<ul style="list-style-type: none"> ○ Sales of licenses could generate revenue ○ Organizations could pay an annual license fee for all their members ○ Individual license fees ○ Annual relicensing ● Maintaining non-profit status will also allow for receiving grants and general support if needed ● Determine the break-even point for HELIX revenue ● Determine the operation cost estimates by Clearly Energy once HELIX has been created.
6	Members	<ul style="list-style-type: none"> ● Explore interest in users becoming members of HELIX <ul style="list-style-type: none"> ○ If interest, could offer a free membership to utilities, states and others who choose to support the existence of HELIX ○ Transition to charging for membership over time ○ If no interest in becoming a member, could just offer access to HELIX data for free initially, but then charge for use of the data from HELIX over time as the database fills out ○ Offer members a discount for data access ○ Track over time
7	License for Data Access	<ul style="list-style-type: none"> ● Licenses provide access to the HELIX database and ability to extract data <ul style="list-style-type: none"> ○ Membership organizations (e.g., state Realtors Association) could license for access for all their members ○ Individuals (e.g., municipalities, individual businesses) could pay a reduced access fee ● Initial and then annual renewal to provide access ● Specifies any access limits, privacy provisions, and other arrangements
8	Licensees	<ul style="list-style-type: none"> ● Need to explain how supporters benefit from financially supporting HELIX. What does their membership get them? ● Membership Classes: <ul style="list-style-type: none"> ○ HELIX Providers ○ HELIX Users ○ HELIX Supporters ● Annual membership fee, varies by class ● Potential members: <ul style="list-style-type: none"> ○ MLS systems ○ Data aggregators ○ Real estate professionals ○ Appraisers ○ Lenders ○ Municipalities ○ Energy information firms ○ State governments

		○ Building Departments
9	Access	<ul style="list-style-type: none"> • Access limitations detailed in licenses • Access to just a score or the full report associated with the score needs to be determined too.
10	Populating the Database with Data	<ul style="list-style-type: none"> • Responsibility transitions from ClearlyEnergy to aggregators working with MLSs • While the HELIX structure will be initially established and populated, in order to maintain the value of the HELIX Database, arrangements to ensure timely, clean and accurate energy data will be paramount • Data consent and privacy provisions will need to be maintained for each state • When a new score is entered into the database for an address that already has a score on file, the old score will need to be archived. Users should be able to access archived scores to see improvements made over time by address.
11	Reporting	<ul style="list-style-type: none"> • Regular reports on data in/out/used to the HELIX Board and others
Phase 3: Undetermined Future HELIX Structure		
12	Operational Detail	TBD

Appendix

SOP Summary

This task applies the research from Task 4 to implement an initial HELIX governance structure and operational plan to guide HELIX development and testing. Major outcomes will include personnel and policy frameworks for overseeing HELIX ownership, management, development, and testing to begin with Period Two.

Objectives Addressed

#2 Develop a system that enables home energy rating scores to be: (A) readily integrated into MLS listing services, market-based home energy services, ratepayer-funded as well as state and local energy efficiency programs, financial service markets, and building energy code officials; and (B) aggregated for analysis and public access to serve state, municipality, or utility/program administrators, and other public interests

Details

Barriers and risks: Those identified for HELIX governance roles could decline or change their positions at some point in the course of the project.

Solutions: The operational plan will include contingencies for HELIX governance succession.

Subtask #	Description	Deliverables
6.1	Recommend and implement preliminary HELIX governance and ownership structure	Framework of preliminary HELIX governance rules and roles
6.2	Develop initial operational plan	HELIX development internal guidance document