



Get Into Energy Career Pathways Implementation Process

Outreach and Student Support

Student Recruitment

Pipeline Organizations

The Get Into Energy Career Pathways model will utilize several pipeline organizations to attract potential low-income young adults to the Pathways system. Each of these organizations has a focus on low-income young adults and can provide a stream of individuals who may be interested in energy industry careers. Pipeline organizations will include:

Jobs for America's Graduates (JAG) Out of School Youth Program

The goal for JAG's Out of School Youth Programs is for high school dropouts to complete requirements for a high school diploma or a GED certificate and be placed in an entry level job leading to a career and/or pursuing a postsecondary education. The program is geared towards participants that have left high school and are committed to taking advantage of the Out of School Youth Program until receipt of a high school diploma or GED plus 12 months of follow-up services.

YouthBuild USA

The mission of YouthBuild USA is to unleash the intelligence and positive energy of low-income youth to rebuild their communities and their lives. YouthBuild USA seeks to join with others to help build a movement toward a more just society in which respect, love, responsibility, and cooperation are the dominant unifying values, and sufficient opportunities are available for all people in all communities to fulfill their own potential and contribute to the well-being of others.

Job Corps

Job Corps offers a comprehensive array of career development services to at-risk young women and men, ages 16 to 24, to prepare them for successful careers. Job Corps employs a holistic career development training approach which integrates the teaching of academic, vocational, employability skills, and social competencies through a combination of classroom, practical, and based learning experiences to prepare youth for stable, long-term, high-paying jobs.

The Corp Network's Service and Conservation Corps

The Corps are state and local programs that engage primarily youth and young adults (ages 16-25) in full-time community service, training, and educational activities. The Corps are a proven strategy for giving young men and women the chance to change their communities, their own lives, and those of their families through service.

Hard Hatted Women

Hard Hatted Women's purpose is to encourage and prepare women for nontraditional employment through outreach, education, training, support, and job placement assistance. They advocate for and implement systems which promote equity in recruitment, training, and

hiring. Hard Hatted Women is currently located in Ohio, but is partnering with CEWD to establish a national presence.

The mix of how many sites will be utilized in each state will vary, depending on the size of the pipeline programs, number of graduates with high school degrees or GEDs, and the interest expressed by the youth at the sites. Additional state or local partners may be added.

Get Into Energy Branding Materials and Expanded Website

The Get Into Energy website caters to three target audiences—youth, the military, and potential engineers. As part of the Career Pathways project, the Get Into Energy Youth site will be expanded to include additional information about energy careers in the four high priority job categories (for example, content on specific types of plant operators such as nuclear or fossil fuel). As part of this, a new *Transitions* site will be built that will contain content specific to the steps (“transitions”) in the Pathways process. The site will also be helpful to individuals who are not necessarily in a pipeline program, but are interested in potentially being a part of the Pathways program, such as unemployed young adults.

In addition to a web presence, marketing materials about energy jobs and the Pathways process will be designed, printed, and distributed to the pipeline organizations, and eventually to One Stop centers. These materials will include a pocket card, informational brochures, and posters to post at the sites of the pipeline organizations.

Initial Entry in Pathways System

Intake/Case Management

All young adults referred to the Pathways program will be assigned a Career Coach within their state. The Career Coach will take them through a structured process to assess their employability skills, career interest, and develop an Education and Support Services plan. The process is outlined in the remainder of this concept paper.

Student Tracking System

The Kuder Journey Career Planning system (www.kuderjourney.com) will be used to track students from intake/case management through six months after employment. Elements of the *Journey* system include a career interest inventory, which will be customized to careers in the energy and related fields (construction and manufacturing); recording of work readiness and employability assessment scores; barriers linked to available state resources; tracking of progress and communication by Career Coaches; links to career information and videos on the Get Into Energy website; use of the “Link to College” tool where students can get information and apply to colleges participating in the Pathways program; and the development of a resume and other job search tools. Career Coaches will be able to use the system to keep track of their cohorts, communicate with them, and run reports. In addition, a student’s career profile is available to that individual for life at no additional charge.

Overview of Career Coaching

Career Coaching Process

Career Coaches will be supplied by One Stops, community colleges, or may be counselors or coaches from the pipeline organizations that continue to work with students. Job Corp, JAG, and The Corp Network all work with their youth one year after they separate from the program. All three organizations expressed strong support of the Pathways process and stated that their coaches and counselors would find it a rewarding process to stay with their students throughout the Pathways process and into employment.

Career advising for this population contains many of the same elements it would for other age and income groups, but there are some stark differences, as well. Individuals are being asked to consider a commitment to work and the requisite training that they may have never considered before. Many may also be lacking in confidence about their ability to succeed because of prior challenges in the workforce or education system. These individuals may require more support than many of those who normally seek help in the One Stops, for example.

Step One- Intake (30-60 minutes)

A Career Coach meets with an individual for the first time, preferably face-to-face. During this session, there is basic sharing of information for agency/organization records, a general discussion of the individual's career goals, and the start of rapport-building to establish what will be an ongoing relationship. It is during this session that the Career Coach considers whether the individual is appropriate for the Get Into Energy program based on stated career interests, background, attitude, etc. The Career Coach will recommend assessments and also consider whether there is anything in the individual's learning path that could be considered for prior learning assessment (e.g., military training, an internship, etc.).

Step Two- Assessments (2-4 assessments)

Assuming that the individual has been determined appropriate for employment in the energy industry (based on the intake session), the Career Coach will recommend that the individual take several assessments, including the Kuder Interest Inventory, the SkillsUSA Employability Assessment, and the assessment to earn a National Career Readiness Certificate (NCRC). The Career Coach will work with the individual to schedule these and set a time to review the results.

Step Three- Assessment Interpretation (1-2 hours)

While some assessments may provide results to the individual immediately, others may require some interpretation by a Career Coach. It is important that the results of all assessments be considered together to create a "big picture" view for the individual of the challenges he or she may face in preparing for a career. Such challenges may include the amount of training indicated by the assessment results, or an indication that perhaps manufacturing or construction (or some other area) would be more in line with the individual's interests and skills. If the latter is the case, the Career Coach would, at this point, make a referral to the identified manufacturing or construction lead, or work with the individual outside of the Get into Energy advising model to identify next steps.

Assuming that the person is a fit for Get Into Energy, the advisor would discuss the challenges with the individual and help create a strategy to meet those challenges. For example, if the individual will require a great deal of training, the Career Coach could help

identify an apprenticeship program that would provide income while training, or grants that might be available based on the individual's income level.

Step Four- Education and Support Services Plan (1 hour)

For the majority of individuals, it is anticipated that there will be a need for education and training. The Career Coach will work with the individual to identify a specific career objective and, based on this, help to identify training providers or special programs provided by the industry or labor unions that could help meet those needs. The result from this session should be a written plan that spells out the steps the individual must take to satisfy the requirements for the chosen career path including specific courses or programs of study, stackable credentials to be sought, and ideas for financial assistance.

Step Five- Identification of Education Provider (Two half-hour sessions)

Once the learning plan has been developed, the individual will be tasked with doing research on the available education and training options. This is part of the empowerment of the advising process. It is important to remember that the decision on an education provider or training path must be the individual's not the Career Coach's. It is anticipated that the individual will do some legwork but then have questions for the advisor before a final decision is made. For this reason, it is recommended that this step be broken into two half-hour sessions. For some, both half hours will not be needed.

Step Six- Ongoing Support (Up to one year; 15-30 minute sessions)

Ongoing support will be a vital component for this population. Many are going to be in the workforce for the first time; others have had unsuccessful attempts at jobs; others may be reaching beyond what they have ever considered possible for themselves before. For this reason, the advisor must be available on an ongoing basis to provide a connection, encouragement, and to serve as a general resource about all things career-related. We recommend monthly contact for the first three months, either in person or by phone for 15-30 minutes. After that, bi-monthly contact through the first year can help to assure success for the individual.

OPTION- While these recommendations are for individual sessions, advisors who are working with multiple clients geared for the Get into Energy program should also consider the use of group sessions. These allow for a greater transfer of knowledge and sharing of experiences and may make some individuals feel more comfortable and more supported.

Career Coaching Training

Prior to the launch of taking on students and beginning the Pathways process, all Career Coaches will be required to participate in eight hours of training. The training will occur virtually utilizing web conference technology, with each session running two hours in length with some additional work to be completed outside the session. Other characteristics of the training include the elements below:

The Coaches' Handbook (manual) will be organized in the same way as the content of the four sessions so that coaches can read the appropriate chapter of the manual in preparation for each online session. Chapters of the manual and other resources relevant to a given lesson will be sent electronically to each Career Coach at least one week prior to each session.

Fictitious case studies representative of the situation of typical members of the target population will be used as a teaching tool. In other words, each coach will be given a case study at the beginning of the course, and an electronic portfolio will be built for this person within the *Journey* system. The coach will be asked to take that person through the steps of the planning process as the course progresses, using forms that are suggested to capture key elements of the process (summary of the intake interview, assessment summary, action plan, and follow-through plan). Coaches will be asked to send these documents to the instructor for review and feedback.

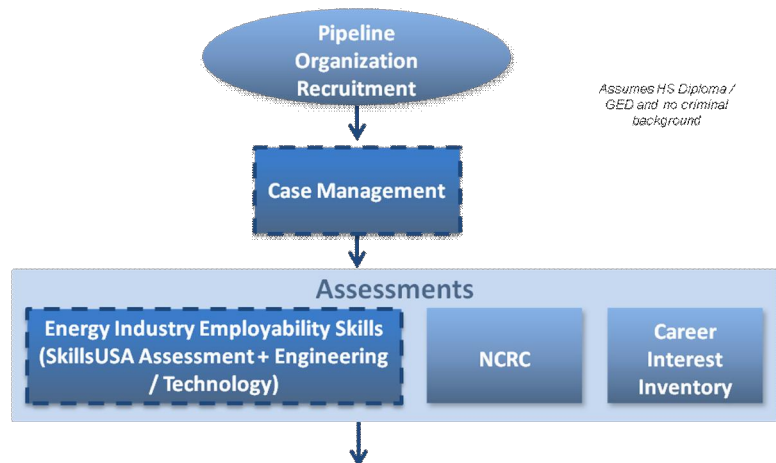
Coaches will have assignments to complete prior to each of the four class sessions. Assignments will include the reading of the appropriate chapter in the manual, completion of a relevant task for the assigned case study client, and for some sessions, the use of relevant web sites (Kuder *Journey*, ACT's *WorkKeys*, SkillsUSA, and sites that describe occupations in the energy field).

Assessment Stage

Once young adults go through the intake process with a Career Coach and are set up in the Kuder system, they will be assessed in two areas—work readiness and energy industry employability skills. These skills coincide with levels one through three of the Energy Industry Competency Model or “Basic Skills.” CEWD will utilize two existing assessments:

WorkKeys: The WorkKeys system assesses academic work readiness skills, specifically reading for information and mathematics. WorkKeys has been adopted by many states in the pilot project, including Florida, Georgia, Minnesota, North Carolina, and in parts of California and Ohio. Indiana and Washington are not currently WorkKeys states and may require the establishment of additional processes to ensure the smooth integration of this credential into their current systems. Minimum scores will be determined by a Credentialing Advisory Group based on the job profiles compiled by WorkKeys.

SkillsUSA Employability/Engineering & Technology Assessment: CEWD is partnering with SkillsUSA to utilize their Employability Skills and pieces of the Engineering assessment which covers the remaining knowledge and skill sets in levels one through three not covered by the WorkKeys assessment. SkillsUSA will create a customized assessment and test bank for CEWD. It is expected that these assessments would be offered at One Stops or computer labs at community colleges. The system is completely online. The minimum score to pass the assessment and earn an Energy Industry Employability certificate is 72%.



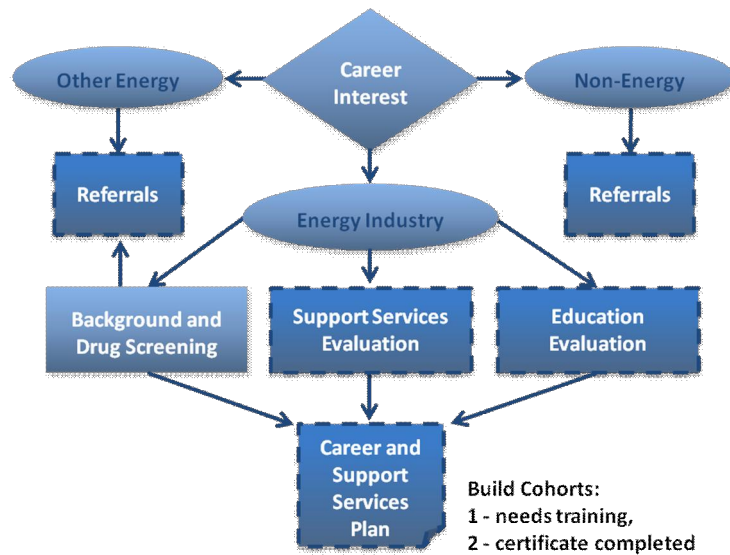
Job Matching

Based on the career interests of the young adults, they can go down one of three paths in the Pathways model.

Energy Industry Focus Jobs: These are the jobs that are the focus of the Get Into Energy Career Pathways model—Pipefitter/Pipelayer/Welder, Lineworker, Plant Operator and Technician. Individuals who select one of these jobs will be eligible to go through the full Pathways process.

Energy Industry Other Jobs: Other energy industry jobs that are not one of the focus jobs above are considered part of this category. A referral process will be set up for individuals who select one of these careers.

Non-Energy Jobs: Manufacturing and construction industry jobs will be integrated into the customized Kuder Career Interest Inventory. A website will be developed where students who are interested in these careers can learn more. In addition, each state will be asked to develop a hand-off process specific to the types of businesses that are prevalent in that state. Regional consortia may be formed within the states with construction and manufacturing partners.



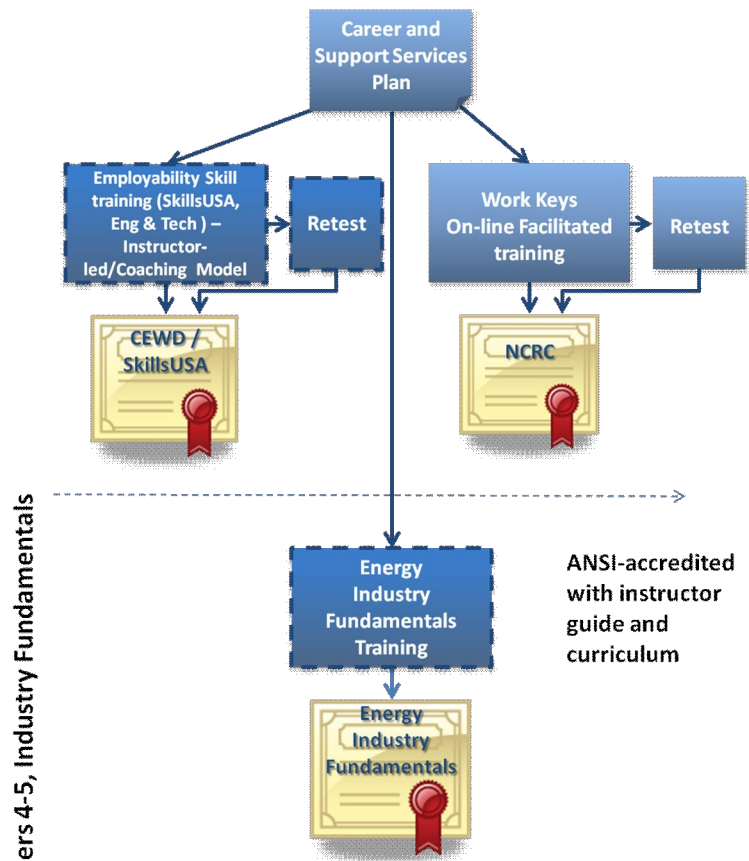
Education and Support Services Plan

Young adults who select one of the Energy Industry Focus Jobs will then go through a background screening, drug test, and support services and education evaluations. Since utilities do not hire applicants who have a criminal background or test positive for drug use, some individuals will need to drop out of the Pathways process or be referred to an industry where this is not a requirement. Those who pass the background screening and drug test will then work with their Career Coaches to determine support services that will be required (based on their barriers identified with the Kuder system) as well as an education plan identifying a bootcamp or community college program. A template will be created and integrated into the Kuder system for Career Coaches to complete this plan. Each individual will be assigned a cohort based on his or her plan.

Education Pathways and Stackable Credentials

Basic Training

The next stage of the Pathways process is to provide training to those who did not pass the work ready and employability skills assessments. A blended learning approach will be used for both the WorkKeys as well as the SkillsUSA training curricula. This will include online modules, instructor-led training, as well as special group activities developed for use with a cohort approach. This training can be provided by community colleges, unions, and other appropriate groups, as identified. Individuals who pass the work ready and employability assessments will skip to the next stage, Energy Industry Fundamentals training.



Energy Industry Fundamentals Training

The next stage of the Pathways process corresponds to levels four and five of the Energy Industry Competency Model—industry-wide and industry-specific knowledge and skills. CEWD will be developing a new credential—an Energy Industry Fundamentals certificate program. This credential will be accredited by the American National Standards Institute (ANSI). As part of the development, an instructor guide, student materials, lab guide and a test bank will be created.

Entry into Job-Specific Training

Once students earn their Energy Industry Fundamentals credential, they will then move into job-specific training—tiers six through eight of the Energy Industry Competency Model. Specific competencies for these tiers are being developed during the Career Pathways planning stage and will drive what is covered in the four programs. In addition, during the pilot stage, not all CEWD-created programs will be available in all eight states. For example, if a student wants to earn a technician degree and that state doesn't have one of the accelerated degrees set up, he or she would enter into a traditional technician program.

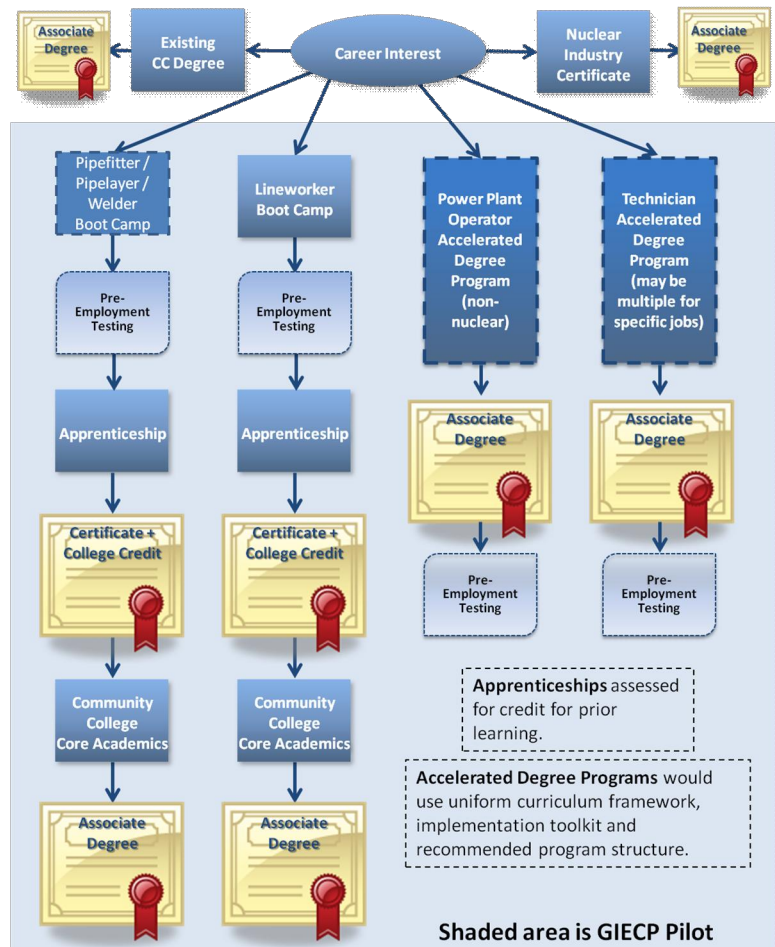
Accelerated Degree Model

The Get Into Energy Career Pathways model will utilize an accelerated degree approach for the utility technician and plant operator categories. Students will go to school full-time and earn their degree in one year. As part of the implementation process, uniform curriculum and a framework

will be developed by groups of community colleges, subject matter experts, and instructional designers. Support services for students during their year of schooling is essential, therefore, CEWD will provide technical assistance to the states and their Career Coaches to utilize the funding available at state and local levels.

The Career Pathways project will leverage existing generation and utility technician associate degree programs to minimize the development time for the accelerated degree programs.

- The University of Missouri will develop the learning requirements for nuclear quality assurance/quality control technicians (nuclear training programs that are not accredited by the National Academy for Nuclear Training) by modifying existing curriculum. This accelerated program will be implemented in Georgia and North Carolina.
- Indian River State College in Florida will modify their existing curriculum used for the training of nuclear technicians to support a more generic non-nuclear generation technician skill development program.
- In Minnesota, leverage the existing energy technical specialist degree program into a one year accelerated program at St. Cloud Technical College.
- In California, enhance the existing power & electrical systems certificate degree program into a one year accelerated degree program.
- In Indiana, leverage the work currently at Ivy Tech to create an accelerated degree program for utility technicians.
- In Washington state, take the existing wind turbine technician program at Walla Walla community college and accelerate it into a one-year offering.
- In Ohio, leverage curriculum currently available at the University of Cincinnati to develop an accelerated utility technician degree program.



Bootcamp/Apprenticeship Model

For the lineworker and pipefitter/pipelayer/welder categories, a bootcamp to apprenticeship model will be utilized. In this model, students would attend an intensive bootcamp where they would not only master the job-specific competencies, but also earn their OSHA-10 certificate and CDL, for lineworkers. The lineworker curriculum has been developed and tested by Georgia Power, who has seen the pass rate for pre-employment testing jump tremendously. This program is eight weeks in length and requires climbing on a daily basis. Sites that desire to offer the programming will need to partner with utilities to secure equipment. The instructor guide and participant materials are available for purchase from Alexander Publishing.

The pipefitter/pipelayer/welder bootcamp will utilize existing curriculum from Barton Community College curriculum. Gas companies have been surveyed on their top pre-apprenticeship knowledge and skills sets, from which a hybrid bootcamp will be created to include all three types of skills.

Upon completion of the bootcamps, students will coordinate with their Career Coaches to secure an apprenticeship with a CEWD member company in their state. Should individuals decide to eventually earn an associate's degree, the bootcamps will be offered for college credit at community colleges or, if offered through a union, submitted for a credit review. In addition, companies can submit their apprenticeship to the American Council on Education's CREDIT to get a credit recommendation. CEWD will fund and guide five member companies through this process to jump start this practice as well as develop a toolkit for other companies to use.

Employment Engagement and Resource Allocation

Job Placement

Pre-employment testing is a standard practice in the energy industry. Students in the Bootcamp/Apprenticeship Model will take this test during their bootcamps. Those in an accelerated degree program will take the test midway through the program and at the end just prior to graduation.

A key component of the Get Into Energy Career Pathways model is the involvement of energy companies in the state consortia participating in the project. Therefore, there will be open communication between the Career Coaches and partner companies to place the students in jobs. Students that pass the pre-employment tests and graduate from the training programs will be granted an interview at the energy companies in the states that are currently hiring. The programs that have been identified for each state have taken into account the demand for those positions in that state.

Retention Strategies

As part of the Pathways model, Career Coaches will maintain their relationships with their students through their first six months of employment. This support is highly valuable to students as they adjust to the workplace, which for most program participants, will be their first jobs. In addition, the Career Coaches will plan in-person or virtual events for the cohorts, enabling students to maintain this support system as well. Based on research, these approaches make the difference between success and failure to maintain employment the first year.

State Energy Consortia Roles and Responsibilities

The state consortia will play a critical role in the implementation and oversight of the Get Into Energy Career Pathways process. They will provide resources in terms of subject matter experts to design curriculum, act as adjunct instructors for the technical courses, acquire materials for the courses (i.e. poles, transformers, valves) and offer financial resources to the students in terms of scholarships or paid internships.

The members of the state-wide energy consortia will be responsible for the implementation and management of the Get Into Energy Career Pathways process. That will include the development and implementation of processes that are sustainable after the two year grant is completed.

Process Design and Planning

1. Identify where Career Coaches are currently available and determine how best to leverage those resources.
2. In conjunction with the manufacturing and/or construction organizations within the state, design the process to hand off students to those industries.
3. Design the process to bring individuals who are interested in the energy industry, but not the skilled craft positions, into each companies' staffing process.
4. Determine where the skills training for the Energy Industry Fundamentals program should be given.
5. Identify and establish relationships with the pipeline organizations best suited for providing viable candidates.
6. Determine where technical resources for training students, particularly in the accelerated degree program options, are available.
7. Support the implementation of the job specific training (bootcamp or accelerated program) with materials and equipment.

Funding

1. Determine what parts of the process the grant money will fund.
2. Determine what entity in the state can accept the grant money and manage its distribution.
3. Research and secure funding sources for the sustainability of the project including assessment costs and funding for Kuder *Journey*.
4. Determine how to pay for the Career Coaches.
5. An accelerated degree program will cost approximately \$12,000/year per student; determine how to fund that effort.

Monitoring

1. Measure the number of candidates provided by each pipeline organization.
2. Monitor student progress; are they dropping out and why.

Project Management

1. If hiring, guarantee an interview to any graduate of a job-specific training program.
2. Share problems and solutions with other pilot states to ensure project success.
3. Share curriculum developed for the job-specific training.

Other

1. Recognize the certification as proof of a student's basic skill level at each stage of the assessment and training process.
2. Submit company apprenticeship programs currently in place for a credit review to the American Council on Education's (ACE) CREDIT.

Program Evaluation

The implementation project will be evaluated using the Key Performance Indicators and Critical Success Factors identified by CEWD in the Workforce Development Evaluation Tool Kit. A web-based system will be developed to accumulate data on the target audience and will measure the success of the target audience against benchmarks for the general employee population.

At completion of the pilot, CEWD will issue a report to include successes, best practices, and lessons learned, followed by adjustments to the model before launching the Get Into Energy Career Pathways model at a national level.