



Office of the Associate Chief Counsel
Passthroughs and Special Industries
Internal Revenue Service
1111 Constitution Avenue NW
Washington, DC 20224
November 4th, 2022

NOTICE 2022-51

**REQUEST FOR COMMENTS UNDER THE PREVAILING WAGE,
APPRENTICESHIP, DOMESTIC CONTENT AND ENERGY COMMUNITY
PROVISIONS OF IRA**

COMMENTS PROVIDED BY KANIN ENERGY, INC. REGARDING THE NOTICE 2022-51 TO INFORM THE GUIDANCE AND RULEMAKING OF THE INFLATION REDUCTION ACT OF 2022 (IRA).

1 INTRODUCTION

Kanin Energy (Kanin) is a leading minority female-led clean energy company that develops waste heat recovery projects for industrial facilities in the United States and Canada. Kanin's main objective is to decarbonize heavy industry with over 1 gigawatt of clean energy projects in various stages of development co-located on industrial sites. We do this through the installation of waste heat recovery technologies that convert waste heat to emission-free baseload power (WHP) for utilization onsite or export to the electrical grid. By reducing the consumption of power drawn from the electrical grid, Kanin's waste heat recovery projects help industrial facilities reduce emissions and increase energy resiliency. Consulting firm ICF International estimates a technical potential of over 14 gigawatts associated with WHP adoption in the United States¹, abating over 60 million tonnes of CO₂ a year.

Kanin is implementing decarbonization projects with many of the nation's largest industrial emitters across multiple verticals including Fortune 50 manufacturers in oil and gas, cement, steel, ceramics and petrochemicals. These and other heavy industries account for one-third of global energy demand and 24% of global GHG emissions as reported by the International Energy Agency², yet decarbonization of these operations remains difficult due to intensive process energy requirements.

Kanin utilizes commercially available technology and focuses on innovative business models rather than on R&D. Due to historically modest regulatory incentives and limited domestic environmental market

¹ Waste Heat to Power Market Assessment. ICF International. <https://info.ornl.gov/sites/publications/files/Pub52953.pdf/>

² International Energy Association, 2020 <https://www.iea.org/reports/tracking-industry-2020>



mechanisms to support the technology, the WHP sector has not yet achieved scale in North America. We are confident that long-term, tax credit provisions like those provided in the Inflation Reduction Act will change that.

Kanin Energy applauds the recognition of waste heat recovery and WHP as a critical tool to achieve US climate goals and for its explicit incorporation in Sections 45 and 48 of the IRA. As a development company, we are heavily vested in the successful deployment of energy facilities utilizing this technology, and our comments below pertain to the mechanisms by which these tax credits will be earned throughout the development, construction and operations of WHP projects. Most comments focus on removing ambiguity to demonstrate compliance in an effort to increase certainty for investment decisions, as well as reducing costs of compliance, especially on small projects. Both play a critical role on project viability and ultimately, the delivery of climate benefits intended under the IRA.

2 GENERAL COMMENTS

Documentation requirements and correction of deficiencies

Kanin applauds the intent of the IRA in supporting livable wages for laborers and providing on the job training for a robust clean energy labor pool. However, without direction around administrative requirements for demonstrating compliance, the administrative burden of compliance can potentially be cost prohibitive, especially to smaller development companies or projects unable to absorb elevated G&A expenses.

45(b)(7)(a) provides that a taxpayer must ensure that any laborers and mechanics employed by the taxpayer, or any contractor or subcontractor, are paid wages at rates not less than the prevailing wage rates for construction, alteration, or repair. 45(b)(8)(c) provides that each taxpayer, contractor, or subcontractor who employs four or more individuals to perform construction, alteration, or repair work with respect to a qualified facility must employ one or more qualified apprentices from a registered apprenticeship program to perform that work.

While EPCs and contractors will manage the daily payroll and apprentice activities, the financial risk of recapture falls back to the project owner/developer for whom added administrative cost can be prohibitive to project execution. For Kanin, excessive incremental costs of compliance may mean the difference between executing a project or not. **Clarity is requested regarding the documentation needed for compliance and how deficiencies, clerical errors or disagreements about worker classifications will be managed and corrected.**

Recommendation: In order to minimize compliance costs, Kanin recommends following the standardized protocols of the Davis-Bacon Act, where applicable, to document payroll reports alongside prevailing wage rates to demonstrate compliance with prevailing wage requirements.



Treasury should provide taxpayers a resource identifying the prevailing wage rates and relevant occupations subject to prevailing wage and apprenticeship requirements.

For the apprenticeship requirement, Kanin recommends enhancing the federal RAPIDS database to incorporate intake of payroll reports, proof of satisfaction of journeyworker to apprentice ratios and apprentice classroom hours. The Department of Labor's Office of Apprenticeship should standardize all reporting and enable their RAPIDS database to intake proof compliance. In the event federal and state program reporting requirements conflict, federal agency criteria should govern. Incorporating reporting requirements into the RAPIDS database intake system will allow standardization of reporting and minimization of transaction costs. An option for proactive or ongoing submittal of documentation to Treasury to demonstrate compliance or flag non-compliance would be valuable to prepare for auditing. Examples of documentation sufficiently and insufficiently addressing good faith exemption requests would also be beneficial.

Prevailing wage documentation and requirements should only apply to laborers and mechanics associated with onsite work of a qualified facility and should exclude any offsite prefabrication of materials or components. Design or engineering trades associated with construction, alterations or repairs should be excluded from prevailing wage requirements. These requests are made to minimize the cost burden of administrative record keeping amongst multiple parties.

It should be recognized that from time to time, inadvertent errors, deficiencies or other challenges will occur that may force non-compliance with prevailing wage and apprenticeship requirements during construction, repairs or alterations. To minimize the risk of recapture for such instances, the taxpayer should be allowed the remaining duration of construction, repairs or alterations to cure the source of non-compliance or prove good faith efforts. If good faith efforts have failed to cure the problem, or documentation suggests a particular aberration is non-curable, the taxpayer should be granted an exception to the particular circumstance that is non-compliant. Liability for the veracity of payroll reports should fall to the prime contractor or direct employer. In the event monopolistic situations would cause undue difficulty to the taxpayer in demonstrating compliance, a good faith exception should be granted.

Kanin has already seen critical industrial projects delayed by ambiguity around costs of documenting compliance with prevailing wage and apprenticeship requirements. The above recommendations will increase investor confidence in qualification for the 30% bonus credit and will minimize the cost of capital for projects by reducing compliance costs through the use of established reporting systems along with allowing good-faith cure periods when changing conditions may force non-compliance.



Timing of demonstration of compliance and variable project metrics

While the IRA provides guidance on metrics required to meet energy community (45(b)(11)(B)), domestic content (45(b)(9)(B)), apprenticeship (45(b)(8)(c)), and prevailing wage (45(b)(7)(a)) criteria, all of these metrics change over the course of project development and construction. An example might be an increase in prevailing wages during construction or a state apprentice agency's journeyworker to apprentice ratio could change during the course of construction. These data points fluctuate over time, yet certainty is required to enable financing of these projects.

The IRA does not establish at what point in time the metrics should be documented to prove compliance, or address scenarios whereby project conditions change that would force non-compliance, and, more specifically, how such scenarios could be rectified or documented. **The Act does not specify a specific point in time when documentation must demonstrate compliance. How and when are triggering events memorialized for purposes of compliance, and to what extent must compliance be modified if changes occur after the start of construction, repair or alterations.** For example, should a taxpayer be required to modify its construction labor contracts if compliance was previously demonstrated by changing state or other labor laws forced non-compliance?

Recommendation: For prevailing wage and apprenticeship requirements, compliance should be considered demonstrated if documentation is provided at the start of construction (i.e., when the project qualifies for Safe Harbor), or at the start of repairs or alterations that trigger compliance. For the domestic content and energy community bonuses, Treasury should consider compliance demonstrated if documentation is provided anytime after 12 months prior to the start of construction (i.e., when the project qualifies for Safe Harbor), in order to facilitate investors' final investment decisions. If compliance has been satisfied continuously since those start dates, the taxpayer shall not be subject to later changes to the triggering criteria that could later force non-compliance.

This timing consideration around which compliance is first demonstrated is important because continual exposure and adjustments to changing conditions would add cost, complexity and administrative burden to project development and construction. Further, final investment decisions may be made upon a specific outlook of compliance likelihood. If compliance conditions are subject to change, and best efforts to remain compliant could fail (e.g. due to contractual restrictions), the taxpayer may elect not to pursue the project. Kanin is already experiencing pushback from large energy companies expressing concern about changes in compliance metrics and risks of future compliance. Proof of compliance at a single point in time will help alleviate these potential concerns and keep technically viable projects from being abandoned.



Adjusted percentage calculation of manufactured products, Iron and Steel

Section 45(b)(9)(B) provides an increased 10% credit for any steel, iron or manufactured product produced in the United States. Further, the manufactured products which are components of a qualified facility upon completion of construction shall be deemed to have been produced in the United States if not less than the adjusted percentage (as determined under subparagraph (C)) of the total costs of all such manufactured products of such facility are attributable to manufactured products (including components) which are mined, produced, or manufactured in the United States.

In general, a lack of clarity around the definitions of manufactured products, components and subcomponents makes this provision difficult to interpret and the cost basis calculation for manufactured products ambiguous. If all manufactured products are required to separately satisfy a domestic cost basis threshold, those projects with a single non-domestic component may be forced to apply for an exception, when in reality the vast majority of the project's materials are of US origin. **Clarity is required around the cost basis calculation for manufactured products and whether it can be performed once for all aggregated manufactured products or if it must be performed separately for each manufactured product. Further the IRA does not clearly state what types of US-based iron and steel, if any, can be used within the calculation of cost basis for manufactured products.**

Recommendation: Kanin Energy currently sources one of its major facility components overseas due to a lack of domestic manufacturing capability producing products of comparable quality, market deployments and overall technical reliability. These components are just one of several manufactured products, in addition to balance-of-plant materials, comprising our final assembled energy facilities. Excluding this major piece of equipment, all other iron, steel and manufactured products are likely to be available from US origin. If the adjusted cost threshold must apply to each manufactured product independently, Kanin's projects will likely not qualify for the domestic content bonus due to a single manufactured product sourced non-domestically. Without a reliable domestic alternative for this key piece of equipment, we estimate a failure to qualify for the domestic content bonus would eliminate roughly 250MW of clean electricity projects in our pipeline from viability.

As an alternative to seeking exceptions to domestic content, Kanin recommends the guidance be written such that the adjusted cost percentage for manufactured products be calculated to include all manufactured products, as well as structural US iron and steel, in a single calculation to determine compliance. We believe the Buy American Act provides a sound framework for this cost basis calculation in that all manufactured products (including components) would be deemed domestically produced so long as a threshold percentage of *total costs* are of US origin. If all components were treated as separate manufactured products for purposes of the adjusted cost calculation, the burden of tracking the origin of each and every subcomponent would be prohibitive and not practical. Further, Kanin recommends that any manufactured product, regardless of source, should be considered of US origin, if any manufacturing process or final assembly occurs in the US.



The recommended formula to determine the adjusted cost percentage basis of US-based manufactured products would be represented by:

$$\frac{\text{(the sum of costs of all US manufactured products + the cost of all US structural iron and steel)}}{\text{(the sum of costs of all manufactured products + the cost of all US structural iron and steel)}}$$

Regarding iron and steel, Kanin recommends following the framework of 49 CFR 661.3 and 661.5 which describes steel and iron end products in terms of structural items and excludes steel and iron requirements as applied to components of manufactured products.

Regardless of the approach adopted by the IRS, example calculations from the IRS are requested to illustrate final rulemaking on this topic.

Verification of significant fossil fuel employment for the Energy Community bonus

45(b)(11)(B) provides an increased credit amount for a qualified facility located in a metropolitan statistical area or a non-metropolitan statistical area that has 0.17 percent or greater direct employment or 25 percent or greater local tax revenues related to the extraction, processing, transport, or storage of coal, oil or natural gas and an unemployment rate at or above the national average unemployment rate for the previous year. Varying industry metrics and employment data provide different trade definitions for the fossil-fuel based direct employment considered in this provision. Additionally, since multiple taxing jurisdictions can comprise a single Metropolitan or Non-Metropolitan Statistical Area, it is likely impractical, if not impossible, to identify what percentage of tax revenue is attributable to fossil fuel employment. **To avoid confusion and standardize the evaluation of qualification for this energy community provision, a consistent database or, at a minimum, methodology, should be used to calculate and verify either 0.17% direct employment or 25% or greater local tax revenues from fossil fuel industry.**

Recommendation: Through extensive research, Kanin has estimated that hundreds of MWs of projects in our pipeline are located in areas that meet the qualifications of an energy community on the basis of 0.17% direct employment in fossil fuels. In performing this research, however, over 10 databases were searched to find supporting data, some of which were produced by trade associations. It would be very difficult for our investors to advance our projects without knowing if Treasury would validate and accept this type of research, and thus have certainty around the domestic content adder. To verify 0.17% direct employment, we recommend approving the use of Bureau of Labor Statistics data and/or other centralized and standardized labor or industry statistical data, or other reasonably-prepared industry trade data as presented by the taxpayer, the validation of which should not be unreasonably withheld by Treasury.

Local tax revenues resulting from fossil fuel-related business activities is not practical to identify and tabulate. As an alternative, we suggest using EIA and Homeland Infrastructure Foundation-Level Data

(HIFLD) data files listing locations of coal, oil and natural gas infrastructure as a proxy for local business activities associated with fossil fuel, per methodology detailed by Vibrant Clean Energy and detailed at the following website:

https://www.vibrantcleanenergy.com/wp-content/uploads/2022/09/IRA_EC+LIC_VCE-Analysis.pdf.

3 COMMENTS ON SPECIFIC ISSUES

.02 Apprenticeship:

Good faith exemptions for sourcing apprentices

45(b)(8)(c) provides that each taxpayer, contractor, or subcontractor who employs four or more individuals to perform construction, alteration, or repair work with respect to a qualified facility must employ one or more qualified apprentices from a registered apprenticeship program to perform that work. The IRA also specifies taxpayers must comply with state-required journeyworker-to-apprentice ratios, which implies state apprentice agencies or the state field offices managed by the Department of Labor's Office of Apprenticeship will be instrumental in sourcing apprentices and helping administer compliance with local requirements. Depending on the location of a specific project, however, a state program may or may not be able to source apprentices within a reasonable geographic distance from the project location. Additionally state or federal apprenticeship registrations are subject to change, as is apprentice availability due to turnover. **Guidance should be provided to determine rulemaking if no apprentices are able to be sourced within a specific geographic radius and if conditions change within state apprentice programs that constrain or impact the availability of apprentices.**

Recommendation: Emphasizing again the potentially burdensome administrative cost around managing apprenticeship programs, especially for the relatively small projects Kanin develops, taxpayers should be allowed an exemption if no apprentices are able to be sourced within a reasonable geographic driving distance to the project location. Apprentices residing a substantial distance from the project location are likely to be less reliable and subject to greater turnover, thereby adding to project costs. The taxpayer should be granted a good faith exemption to the apprentice requirements of 45(b)(8)(c) if no apprentices are able to be sourced within 50 driving miles, or a 1 hour drive, of the project location by the applicable state apprentice agency(ies) or field office(s). Similar good faith exemptions should be provided if the taxpayer can document changing availability of apprentices that challenge the taxpayer's ability to satisfy the apprenticeship hours requirements. A grace period equal to the duration of construction, alterations or repairs should be provided for the taxpayer to show good faith efforts to cure the problem.



.01 Prevailing Wage and .02 Apprenticeship:

Repairs and alterations vs. routine maintenance

45(b)(7)(a) provides that a taxpayer must ensure that any laborers and mechanics employed by the taxpayer, or any contractor or subcontractor, are paid wages at rates not less than the prevailing wage rates for construction, alteration, or repair. 45(b)(8)(c) provides that each taxpayer, contractor, or subcontractor who employs four or more individuals to perform construction, alteration, or repair work with respect to a qualified facility must employ one or more qualified apprentices from a registered apprenticeship program to perform that work. To the extent that burdensome and costly administration of labor requirements under IRA jeopardize project economic viability, especially on smaller projects below 50MW, the requirement for prevailing wages and apprentices should be limited to initial construction, and significant alterations or repairs. **All projects require routine maintenance which should be exempt from prevailing wage and apprenticeship requirements, but the IRA lacks clarity around the definition of alteration, repairs and routine maintenance.**

Recommendation: Most of Kanin Energy's WHP projects are smaller than 20MWe with operating budgets of less than \$1M annually. Excessive reporting and labor requirements during operations and maintenance can increase costs substantially, minimize ongoing operating margins and threaten overall viability of a project. Routine maintenance should be excluded from the definitions of alterations or repairs and should include any regularly scheduled maintenance activity occurring at a frequency of 5 years or less. Any scheduled or unscheduled maintenance costing less than 50% of a new replacement facility should also be classified as routine maintenance. This 50% cost threshold is consistent with existing US EPA frameworks for triggering new federal permitting requirements.

.02 Apprenticeship:

Journeyworker-to-apprentice ratio discrepancies

45(b)(8)(b) provides that the apprentice to journeyworker ratio shall be subject to any applicable requirements of the Department of Labor or the applicable State apprenticeship agency. **The Act does not specify which requirement prevails in the case of discrepancy between the two agencies.**

Recommendation: That agency with the lower apprentice to journeyworker ratio shall prevail. The reasoning for preference to select the lower ratio is to minimize the economic burden of compliance.

.04 Energy Community:

Definitions of MSAs, non-MSAs, and census tracts

45(b)(11)(B) provides an increased credit amount for a qualified facility located in a metropolitan statistical area or a non-metropolitan statistical area that has 0.17 percent or greater direct employment or 25 percent or greater local tax revenues related to the extraction, processing, transport, or storage of coal, oil or natural gas and an unemployment rate at or above the national



average unemployment rate for the previous year. The same section provides the credit enhancement to projects located in census tracts in which coal mines or coal-fired electrical generating units have been retired. **Ambiguity amongst definitions of Metropolitan Statistical Areas, Non-metropolitan Statistical Areas and Census Tracts exist, and no reference is provided to ensure standardized references defining each geographic category will be used.**

Recommendation: To avoid confusion, standardize documentation and facilitate auditing, Kanin recommends specifying that definitions of Metropolitan Statistical Areas and Non-metropolitan Statistical Areas be consistent with those published by the May 2021 Bureau of Labor Statistics Occupational Employment and Wage Estimates, located here: https://www.bls.gov/oes/current/msa_def.htm#2200003. These definitions list each Area specifically by county or parish and eliminate ambiguity introduced by the incorporation of Micropolitan Statistical Areas as provide by the US Census Bureau. Clarity in this definition will facilitate validation of the energy community bonus and will bring certainty to investment decisions early in the development process.

US Census tracts should be defined based on the 2020 census with mapping and local boundaries provide here: <https://www.census.gov/geographies/reference-maps/2020/geo/2020pl-maps/2020-census-tract.html>. Kanin believes these standardized definitions will facilitate the determination of qualification for the energy community credit and will ensure IRS auditing and review is streamlined and efficient.

.04 Energy Community:

Prior year language for demonstration of unemployment

45(b)(11)(B) provides an increased credit amount for a qualified facility located in a metropolitan statistical area or a non-metropolitan statistical area that has (or has had at any time since December 31st, 2009) 0.17 percent or greater direct employment or 25 percent or greater local tax revenues related to the extraction, processing, transport, or storage of coal, oil or natural gas and an unemployment rate at or above the national average unemployment rate for the “previous year”. Because the employment criteria could be satisfied in any year since 2010, one interpretation would allow the unemployment criterion to be satisfied at any time in that same window, provided it was during the year before the employment criteria were documented to have been met. Alternatively, “previous year” could mean the year before start of construction, filing for the credit or any other major project milestone. **The requirement for the MSA or Non-MSA to have unemployment at or greater than the national average for the previous year is ambiguous and requires clarification with respect to the definition of “previous year”.**

Recommendation: As presented above in the discussion of domestic content, an incremental 10% bonus credit is extremely meaningful for our projects and can significantly impact project viability. Kanin estimates that the portion of our pipeline of projects highly sensitive to the domestic content and energy community bonus credits could abate millions of tons of CO₂e annually from heavy industrial emitters, including steel and cement plants, petrochemicals and fuels manufacturing. Again, to avoid additional project costs and to simplify filing, auditing and the



overall burden of compliance, Kanin recommends the “previous year” requirement of 45(b)(11)(B)(ii)(II) be clarified such that the unemployment rate must be at or greater than the national average in the year prior to the year 0.17 percent or greater direct employment, or 25 percent or greater local tax revenues, is demonstrated. Should these criteria be satisfied at any point during the allowed timeframe prior to start of construction, the energy community requirement should be deemed satisfied. Additionally, we suggest including an example with timelines on how this calculation is intended to be used.

.03 Domestic Content:

Exceptions to domestic content

45(b)(10)(D) provides an exception to the domestic content requirement if the inclusion of steel, iron or manufactured products which are produced in the United States increases the overall costs of construction of qualified facilities by more than 25 percent, or relevant steel, iron or manufactured products are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality. While Kanin applauds the tenor of the IRA to enhance US manufacturing with domestic content requirements, we expect from time to time, taxpayers will look to the exception afforded in 45(b)(10)(D) for those manufactured products unable to be sourced domestically due to cost or quality constraints. We agree with the spirit of this exception which would still allow a domestic content adder for those projects which, in good faith, attempt to procure US products, iron and steel, but have little to no domestic options for certain critical parts and components. In these instances, Kanin would expect the domestic content exception to be a critical requirement for investment decisions. **Clarity is therefore requested to remove ambiguity around documentation required to demonstrate that domestic supply of certain components would increase overall facility costs by 25% or not be available in sufficient quality. Additionally, guidance should specify a point in time at which documentation is required to substantiate any exception request, recognizing that an indication of qualification for the exception likely will be required before final investment decisions.**

Recommendation: Kanin recommends Treasury use the framework of the Buy American Act in determining exceptions to domestic content requirements. Taxpayers shall provide evidence highlighting the deficiency in US manufacturing capability for the manufactured products in question, and such evidence shall be deemed valid to substantiate the domestic content exception if documented within 12 months prior to the start of construction. This evidence should describe in detail the qualitative or costing limitations of domestic supply for the parts for which an exception is sought, and validation of such should not be unreasonably withheld. Those manufactured products for which an exception is sought should be removed from the calculation of adjusted cost basis. Examples showing acceptable levels of documentation substantiating specific insufficiencies of alternative domestic supply should be provided. Kanin anticipates that identification of qualification for the domestic content adder prior to final investment decision will significantly improve financing and unlock hundreds of MW of additional clean energy projects in the industrial sector.



4 CONCLUSION

Kanin Energy thanks the Department of Treasury and the IRS' Office of the Associate Chief Counsel for the opportunity to provide these comments regarding the implementation of this critical and ground-breaking piece of legislation. The provisions within the IRA are transformative to the clean energy industry and will allow Kanin and our peers to drive emissions reduction across multiple industrial sectors that are traditionally very difficult to decarbonize. Concise guidance and direction from the Department of Treasury will be critical to avoid costly and potentially prohibitive costs in demonstrating compliance, and will also significantly facilitate financial underwriting to keep projects viable earlier in the development process.

We thank you for seeking the input of key stakeholders like Kanin Energy, and we look forward to participating further in the process if and when appropriate.

Respectfully and sincerely submitted,

A handwritten signature in black ink, appearing to read "Janice", written in a cursive style.

Janice Tran
Chief Executive Officer
Kanin Energy, Inc.