Legal Liability for Violations of Energy Legislation: A Comparative Analysis of the Experience of SCO Member States (The Cases of the Russian Federation, the Republic of Kazakhstan, the Republic of Uzbekistan, and the People's Republic of China)

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Abstract. In the context of deepening energy cooperation among Shanghai Cooperation Organization (SCO) member states, the legal mechanisms ensuring compliance with energy legislation acquire particular significance. This article presents a comparative legal analysis of legal liability for violations of energy legislation, examining the cases of the Russian Federation, the Republic of Kazakhstan, the Republic of Uzbekistan, and the People's Republic of China. The research methodology combines general scientific methods with specialized legal methods, particularly the comparative legal approach, while the normative basis comprises legislative acts in the fields of electric power, energy conservation, administrative offences codes, and criminal codes of the respective states. The study identifies three conceptually distinct models of criminalization in the energy sector: the Russian model of maximum differentiation featuring specialized criminal offences; the Kazakh model of limited criminalization focused on critical infrastructure protection; and the Uzbek-Chinese model integrating liability for energy offences into crimes against property. Analysis of the 2021–2025 legislative reforms reveals a general trend toward stricter liability for the most socially dangerous acts across all examined jurisdictions. The article substantiates conclusions regarding the potential for harmonizing legal regulation within the SCO framework whilst preserving national specificities, and formulates practical recommendations for improving national legislation and establishing mechanisms for exchanging law enforcement practices among member states. The findings contribute to the underexplored area of comparative energy law scholarship and may be of value to legislators, legal practitioners, and researchers engaged in energy law and regional integration studies.

INTRODUCTION

In the context of the global transformation of energy markets and escalating geopolitical tensions, questions of legal assurance of energy security are acquiring paramount importance. The Shanghai Cooperation Organization (SCO), uniting ten member states — the Republic of Belarus, the Republic of India, the Islamic Republic of Iran, the Republic of Kazakhstan, the People's Republic of China, the Kyrgyz Republic, the Islamic Republic of Pakistan, the Russian Federation, the Republic of Tajikistan, and the Republic of Uzbekistan — constitutes a unique integration association whose territory encompasses approximately 36 million km² (over 60% of Eurasia's landmass), with a population exceeding 3.4 billion people, nearly half of the world's population [1]. According to 2024 data, the combined share of SCO member states in global gross domestic product has reached one-third, and forecasts for 2025 suggest it may rise to 35% [2].

Energy cooperation constitutes one of the priority areas of SCO activities. According to the Report on SCO Countries' Cooperation in Renewable Energy Sources for 2024, member states account for approximately half of the world's renewable energy capacity [3]. By the end of 2024, the installed capacity of renewable energy sources in SCO countries reached 2.31 billion kW, which is 14.5 times higher than the figures at the time of the Organization's establishment [4].

At the same time, the intensification of energy ties inevitably raises questions about the effectiveness of legal mechanisms for ensuring compliance with energy legislation [5]. The institution of legal liability for offences in the energy sector serves as a key instrument for maintaining the rule of law, protecting the rights of participants in energy legal relations, and ensuring the uninterrupted functioning of the fuel and energy complex [6]. However, the national legal systems of SCO member states demonstrate significant differences in approaches to defining the elements of offences, types and amounts of sanctions, and enforcement mechanisms.

The degree of scholarly development of this topic is characterized by the existence of a considerable body of research devoted to specific aspects of energy law in national legal systems. Nevertheless, comprehensive comparative legal studies of the institution of liability for violations of energy legislation in SCO member states remain insufficiently represented in contemporary legal scholarship. This circumstance determines the scientific novelty and practical significance of the present study.

The purpose of this study is to conduct a comparative legal analysis of the institution of legal liability for violations of energy legislation in SCO member states, to identify common patterns and national specificities of legal regulation, and to formulate proposals for improving legislation and harmonizing legal approaches.

To achieve this purpose, the following objectives were set: to determine the theoretical and legal foundations of the institution of liability in the energy sector; to analyze the regulatory framework and law enforcement practice of SCO member states (using the examples of the Republic of Uzbekistan, the Russian Federation, the Republic of Kazakhstan, and the People's Republic of China); to identify common features and national specificities of legal regulation; to assess the effectiveness of existing liability mechanisms; and to determine the prospects for harmonizing legislation within the SCO framework.

The methodological basis of the study comprises general scientific methods of inquiry (analysis, synthesis, induction, deduction, systematic approach) and specialized legal methods (formal-legal, comparative legal, historical-legal). The comparative legal method enables the identification of patterns in the development of the institution of liability across different legal systems and the determination of optimal models of legal regulation. The normative basis of the study comprises legislative acts of SCO member states in the fields of electric power, energy conservation and rational use of energy, administrative offences codes and criminal codes of the respective states, as well as international instruments adopted within the SCO framework.

The practical significance of the study is determined by the possibility of using its results in legislative activities when improving national legislation on liability for offences in the energy sector, in the law enforcement practice of judicial and administrative bodies, and in the process of developing unified approaches to legal regulation within the SCO framework. The results of the study may be of value in the educational process when teaching courses on energy law, comparative law, and international law.

THEORETICAL AND LEGAL FOUNDATIONS OF LIABILITY IN THE ENERGY SECTOR

Energy law constitutes a system of legal norms regulating social relations arising in connection with the production, transformation, transmission, sale, use, and conservation of various types of energy resources, as well as with ensuring energy security [7]. This definition reflects the comprehensive nature of energy legislation, which encompasses the entire cycle of energy activities — from the extraction of primary energy sources to the final consumption of energy.

From a doctrinal perspective, the legal nature of energy law remains a subject of scholarly debate. V.F. Yakovlev rightly observes that energy law represents a reality, while the question of its place in the legal system — whether it constitutes an independent branch of law or a branch of legislation — remains open [8]. P.G. Lakhno considers energy law as a sub-branch of business law [9], emphasizing the economic content of the regulated relations.

The prevailing position in contemporary scholarship holds that energy law is of a comprehensive nature, combining norms of public and private law. As V.F. Popondopulo aptly notes, energy legislation should be regarded as an integrated, comprehensive branch of legislation, where the subject matter of regulation includes elements of primary, fundamental branches [10]. Indeed, energy relations are regulated by norms of constitutional, administrative, civil, criminal, environmental, and other branches of law.

The legal nature of energy legislation in SCO member states is characterized by a number of common features: a codification approach to regulating energy relations, a combination of public law and private law methods of regulation, and an orientation toward ensuring energy security and developing market mechanisms in the energy sector. The legislation of the Russian Federation on electric power is based on the Constitution of the Russian

Federation and includes the Civil Code of the Russian Federation, Federal Law “On Electric Power Industry” of 26 March 2003 No. 35, and other federal laws. In the Republic of Kazakhstan, the foundational act is the Law “On Electric Power Industry” of 9 July 2004 No. 588-II. The Republic of Uzbekistan adopted a new Law “On Electric Power Industry” on 7 August 2024 No. 939, which entered into force on 9 November 2024. In the People’s Republic of China, the first comprehensive Energy Law was adopted in November 2024, entering into force on 1 January 2025.

The principal objective of energy legislation is the legal regulation of relations in the energy sector with the aims of meeting the energy resource needs of the population and the economy, ensuring their rational use, creating conditions for equal participation in economic activity by organizations of all forms of ownership, fulfilling international obligations, and protecting the environment. Energy legislation is designed to create the legal framework for regulating the extraction (production), transformation, transportation, distribution, and consumption of energy resources.

TYPES OF LEGAL LIABILITY FOR VIOLATIONS IN THE ENERGY SECTOR

Legal liability for violations in the energy sector constitutes the application to the offender of measures of state coercion established by law in connection with the commission of an unlawful act. The legal systems of SCO member states distinguish four principal types of legal liability: administrative, criminal, civil, and disciplinary.

Administrative liability is the most prevalent type of public law liability in the energy sector. In the Russian Federation, administrative offences in this area are provided for by a number of articles of the Code of Administrative Offences: Article 9.11 (violation of rules for the use of fuel and energy), Article 9.16 (violation of legislation on energy conservation and improvement of energy efficiency), Article 14.6 (violation of pricing procedures), and others. Sanctions range from warnings to administrative fines, the amount of which depends on the nature of the offence and the status of the liable party.

In the Republic of Kazakhstan, administrative liability for offences in the energy sector is established by the Code of Administrative Offences of 2014. Notably, Article 300-1 of the Code of Administrative Offences of the Republic of Kazakhstan provides for liability for energy transmission organizations exceeding the approved normative values of electricity supply reliability indicators. Furthermore, for certain violations of electricity legislation, the amount of the fine may be calculated based on the income (revenue) derived from the offence.

In the Republic of Uzbekistan, substantial amendments to the Code of Administrative Liability were adopted in 2023, aimed at strengthening liability for the unlawful use of energy resources. In 2025, liability was further tightened: individual entrepreneurs were designated as subjects of administrative offences in the energy sector on an equal footing with legal entities.

Criminal liability arises for the most socially dangerous acts in the energy sector. The Criminal Code of the Russian Federation provides for a number of specialized offences: Article 215 (violation of safety rules at nuclear energy facilities), Article 215.1 (termination or restriction of electric power supply or disconnection from other life support sources), Article 215.2 (disabling life support facilities), and Article 215.3 (disabling oil pipelines, petroleum product pipelines, and gas pipelines).

Article 215 of the Criminal Code of the Russian Federation is constructed as an offence of concrete danger: criminal liability under part one arises when safety rules at nuclear energy facilities are violated in a manner creating a threat of human death or radioactive contamination of the environment. The sanction provides for alternative types of punishment — from a fine of up to 200,000 roubles to imprisonment for a term of up to three years. The aggravated form of the offence includes negligently causing grievous bodily harm, the death of a person, or radioactive contamination of the environment, entailing imprisonment for a term of up to five years. The most serious form of the offence is constituted by causing the death of two or more persons, with a maximum punishment of imprisonment for a term of up to seven years.

In the PRC, criminal liability for violations in the energy sector was substantially tightened by Amendment XI to the Criminal Code, which entered into force on 1 March 2021. Along with amendments to Article 134 of the Criminal Code of the PRC, a new Article 134-1 was introduced, which for the first time expressly provides for criminal liability for unlawful acts posing a real threat of accidents with grave consequences, even if such consequences did not actually occur. In Uzbekistan, acts involving the unlawful use of electricity, gas, and water supply for commercial purposes are classified as theft.

Civil liability in the energy sector is characterized by the pecuniary nature of sanctions and is aimed at restoring violated rights and compensating losses. This type of liability is implemented predominantly within the framework of contractual relations between energy supply organizations and consumers, although tort liability for harm caused due

to deficiencies in energy supply is also possible. The principal forms include: compensation for damages, including actual losses and lost profits; payment of contractual penalties (liquidated damages, fines, default interest); and compensation for non-pecuniary damage (moral harm) in cases provided by law.

A distinctive feature of the civil liability of energy supply organizations is its limited character. In accordance with Article 477 of the Civil Code of the Republic of Uzbekistan, in cases of non-performance or improper performance of obligations under an energy supply contract, the party in breach of the obligation is required to compensate the actual damage caused thereby. Thus, the legislator established an exception to the general principle of full compensation of damages by excluding the recovery of lost profits. A similar approach is observed in the legislation of a number of SCO states (the Russian Federation, Kazakhstan, Belarus, and others), which is attributable to the specific characteristics of energy supply as a continuous technological process, where full compensation of damages could lead to a disproportionate burden on energy supply organizations. Additionally, the legislation of SCO states provides for contractual liability for the quality of supplied energy, interruptions in energy supply, and violations of consumption regimes.

Disciplinary liability applies to employees of energy enterprises for violation of labor duties, internal labor regulations, and occupational health and safety requirements [11]. Disciplinary sanctions include a warning, a reprimand, and dismissal on appropriate grounds. The particular nature of the energy sector necessitates heightened requirements for compliance with technological discipline, since violations may result in accidents with serious consequences. It is important to note the principle of concurrent legal liability: the imposition of an administrative penalty on a legal entity does not exempt the culpable natural person from administrative liability for the same offence, just as holding a natural person administratively or criminally liable does not exempt the legal entity from administrative liability [12]. Similarly, holding a party liable under public law does not preclude civil liability for the harm caused.

SUBJECTS OF LIABILITY: PRODUCERS, SUPPLIERS, CONSUMERS, AND REGULATORY AUTHORITIES

The subject composition of legal liability in the energy sector is characterized by considerable diversity and encompasses all participants in energy legal relations. Based on a functional criterion, it appears justified to distinguish four principal categories of subjects: energy producers, energy transmission and distribution entities, consumers, and state regulatory authorities. Examination of the specific features of liability for each of these categories enables the identification of both common patterns and national specificities of legal regulation in SCO member states.

The initial link in the chain of energy legal relations comprises energy producers (energy-generating organizations) — legal entities engaged in the production of electric and thermal energy at generating facilities of various types: thermal power plants, hydroelectric power plants, nuclear power plants, and facilities utilizing renewable energy sources. This category of subjects bears responsibility for compliance with technical regulations, industrial safety rules, environmental requirements, and licensing conditions for conducting activities [13]. With respect to operators of nuclear energy facilities, the legislation establishes a regime of heightened liability, which is attributable to the potential danger of their activities to the life and health of the population, as well as to the environment.

The produced energy reaches end consumers through the networks of energy transmission and energy distribution organizations, which also bear responsibility for ensuring the reliability and quality of energy supply. The legislation of SCO member states demonstrates a uniform approach to establishing liability for these entities, enshrining their obligation to ensure uninterrupted and high-quality energy transmission while simultaneously establishing mechanisms for damage compensation in the event of breach of this obligation.

The basic principle reflected in the legislation of all the states under consideration is the imposition on energy transmission organizations of liability for the reliability of energy supply within the networks they operate. Thus, Article 38 of Federal Law of the Russian Federation of 26 March 2003 No. 35 “On Electric Power Industry” stipulates that electric power industry entities ensuring the supply of electric power to consumers, including energy sales organizations, suppliers of last resort, and territorial grid organizations, are liable to consumers for the reliability of their electric power supply and its quality in accordance with the requirements of technical regulations and other mandatory requirements. A similar approach is enshrined in Article 60 of the Law of the People’s Republic of China “On Electric Power Industry” of 1995, according to which electric power enterprises that cause damage to consumers or third parties as a result of accidents at electrical installations bear liability for compensation of damages in accordance with the law, while being exempt from liability only in cases of force majeure or fault of the consumer. The Law of the Republic of Uzbekistan of 7 August 2024 No.939 “On Electric Power Industry” establishes general

provisions on liability for violations of electricity legislation and provides for the application of financial sanctions, and also enshrines the requirement to include in the Rules for the Use of Main Electric Networks provisions on the liability of the transmission system operator for compliance with system security requirements. In the Republic of Kazakhstan, Article 300-1 of the Code of Administrative Offences provides for administrative liability in the form of a fine imposed on officials of energy transmission organizations for exceeding the approved normative values of electricity supply reliability indicators.

A special role in ensuring the reliability of energy supply is played by system operators, which carry out centralized operational dispatch control of power systems. Their functions include ensuring parallel operation with the power systems of other states, maintaining the balance of energy production and consumption, providing system services, and coordinating the actions of all participants in the energy market. The Law of the Republic of Kazakhstan "On Electric Power Industry" of 9 July 2004 defines the system operator as a national company carrying out centralized operational dispatch control, ensuring parallel operation with the power systems of other states, maintaining balance in the unified electric power system, providing system services for the transmission of electric power, technical dispatching, capacity reservation, and organizing the balancing of electric power production and consumption. Russian legislation in Article 14 of Federal Law No. 35 enshrines the functions of the system operator in ensuring compliance with established parameters of reliability and quality of electric power, forecasting production and consumption volumes, and forming a reserve of production capacities in the Unified Energy System of Russia, while the civil liability of operational dispatch control entities is regulated by Article 18 of the said Law. The Law of the Republic of Uzbekistan No.939 in Articles 20–21 defines the system operator as a legal entity carrying out operational dispatch control — ensuring stable operation through real-time operational management of the unified electric power system and managing the mode of operation in parallel with the electric power systems of other states, while electric power enterprises are obliged to immediately provide the system operator with accurate information necessary for the safe and reliable functioning of the unified electric power system. The PRC Energy Law of 2024 additionally enshrines in Article 37 the obligation of enterprises operating energy transmission networks to guarantee the safety of the functioning of energy transmission systems, while Article 31 provides for the accelerated construction of a new-type power system and the enhancement of the capacity of electric grids to receive, distribute, and regulate renewable energy.

Along with producers and energy transmission entities, a significant volume of obligations and corresponding liability is imposed on consumers — the most numerous category of participants in energy legal relations. This category encompasses both natural persons acquiring energy for household needs and legal entities using energy for production and commercial purposes. At the same time, the legislation of SCO member states, recognizing consumers as the "weaker party" to the energy contract and establishing mechanisms for their enhanced protection, simultaneously enshrines a range of obligations, non-performance of which entails the application of measures of legal liability [14].

The principal obligations of consumers, uniformly enshrined in the legislation of the states under consideration, include: timely and full payment for consumed energy, compliance with established energy consumption regimes, ensuring the proper technical condition of energy-receiving devices and metering equipment, and prevention of unauthorized connection to energy networks. The reciprocal nature of the obligations of the parties to the energy legal relationship is reflected, in particular, in Article 60 of the PRC Law "On Electric Power Industry", which expressly indicates consumer fault as a ground for exempting the energy supply organization from liability for damage caused.

Acts involving the theft of energy through unauthorized connection to networks or falsification of meter readings pose a particular public danger. These offences in the legislation of SCO member states entail differentiated liability depending on the amount of damage caused: from the civil law obligation to compensate the cost of unmetered consumed energy to administrative sanctions, and in cases of large-scale theft — criminal prosecution. The Law of the Republic of Uzbekistan No.939 provides for the application of financial sanctions for unauthorized connection to electric networks and unmetered consumption of electric power, with the amount of sanctions differentiated depending on the category of the offender. A similar approach, evidencing a uniform understanding among SCO member states of the need to protect the property interests of energy supply organizations, is enshrined in the legislation of the Russian Federation, the Republic of Kazakhstan, and the People's Republic of China.

The final link in the system of subjects of liability consists of state regulatory authorities in the energy sector and their officials. The identification of this category is attributable to the fact that the effective functioning of the energy sector depends to a significant extent on the quality of state governance, which includes the formulation of state policy, normative regulation, licensing of activities, and the exercise of control and supervisory functions. Improper performance of these functions may entail systemic violations in the energy sector, which necessitates the establishment of liability for these subjects.

The grounds for liability of officials of state bodies in the energy sector include: unlawful refusal to issue permits and licenses, violation of the established procedure for conducting inspections, failure to take measures to prevent and eliminate identified violations, and other unlawful actions or inaction in the exercise of assigned powers. The legislation of SCO member states provides for disciplinary, administrative, and criminal liability of officials depending on the nature and gravity of the offence committed. Russian legislation in Chapter 30 of the Criminal Code establishes liability for abuse of official powers, excess of such powers, and negligence, which may be committed, inter alia, in the exercise of control and supervisory functions in the energy sector.

An illustrative example of the expansion of the subject composition of liability in view of contemporary challenges to energy security is Article 79 of the PRC Energy Law of 2024, which establishes that organizations and natural persons outside the territory of the People's Republic of China who commit acts threatening national energy security bear legal liability in accordance with the law. This provision reflects an understanding of the transboundary nature of threats to energy security in the context of globalization and the interdependence of national energy systems.

The analysis conducted enables the conclusion that the subject composition of legal liability in the energy sector of SCO member states is characterized by a multi-level structure encompassing all links in the energy chain — from producers to state regulators. Each category of subjects bears liability within the limits of its functional competence, which ensures comprehensive protection of both public interests in the sphere of energy security and private interests of participants in energy legal relations. The uniformity of basic approaches to determining the subject composition of liability in the legislation of the states under consideration creates prerequisites for the harmonization of legal regulation and the development of cooperation within the SCO framework.

CRIMINAL LIABILITY FOR VIOLATIONS IN THE ENERGY SECTOR: A COMPARATIVE ANALYSIS

Criminal liability for offences in the energy sector arises for the most socially dangerous acts that have caused substantial harm to legally protected interests or that create a real threat of such harm. A comparative analysis of the criminal legislation of SCO member states reveals both similarities in the construction of basic offences and national specificities in the definition of aggravating elements and sanctions.

The Criminal Code of the Russian Federation contains a system of specialized provisions establishing liability for offences in the energy sector. Central among these is Article 215 of the Criminal Code of the Russian Federation, which criminalizes violations of safety rules at nuclear energy facilities. From the standpoint of legislative technique, this offence is constructed as an offence of concrete danger: the objective element of the basic offence (part one) includes not only the act itself but also a mandatory element — the possibility of socially dangerous consequences occurring in the form of human death or radioactive contamination of the environment. The sanction under part one is of an alternative nature and provides for a fine of up to two hundred thousand roubles, restriction of liberty, compulsory labor, or imprisonment for a term of up to three years. The aggravated form of the offence involves the actual negligent causation of grievous bodily harm, the death of a person, or radioactive contamination of the environment, entailing punishment in the form of compulsory labor or imprisonment for a term of up to five years. The most serious form of the offence, encompassing the negligent causation of death to two or more persons, provides for imprisonment for a term of up to seven years.

Article 215.1 of the Criminal Code of the Russian Federation establishes liability for the unlawful termination or restriction of electric power supply or disconnection of consumers from other life support sources. The legislator has limited the range of subjects of this offence, attributing it exclusively to officials and persons performing managerial functions in commercial and other organizations. The construction of the basic offence (part one) presupposes the material nature of the offence: criminal liability arises on condition of negligently causing large-scale damage, grievous bodily harm, or other serious consequences. The alternative sanction includes a fine of up to two hundred thousand roubles, restriction of liberty for a term of up to three years, compulsory labor, or imprisonment for a term of up to two years. The aggravated form of the offence, involving the negligent causation of death, provides for compulsory labor or imprisonment for a term of up to five years.

Article 215.2 of the Criminal Code of the Russian Federation criminalizes the disabling of life support facilities (energy facilities, telecommunications facilities, housing and communal services facilities). The maximum sanction under this article — imprisonment for a term of up to seven years — applies in cases of negligently causing death (part three). Article 215.3 of the Criminal Code of the Russian Federation in its current version covers two separate acts: unauthorized connection to oil pipelines, petroleum product pipelines, and gas pipelines, as well as the disabling

of such facilities. The most severe sanction — imprisonment for a term of up to eight years — is provided for under part five for acts that negligently result in the death of a person or other serious consequences.

The criminal legislation of the Republic of Kazakhstan demonstrates a significant degree of convergence with the Russian model of regulating liability for offences in the sphere of energy security, which is attributable to the common historical-legal genesis and the affiliation of both legal systems with the post-Soviet legal tradition. The system of specialized offences in the Criminal Code of the Republic of Kazakhstan includes Article 276, establishing liability for violations of safety rules at facilities using nuclear energy, as well as Article 281, criminalizing similar violations at explosive facilities. The sanctioning policy of the Kazakh legislator generally corresponds to the Russian approach, evidencing the preservation of unified conceptual foundations of criminal law protection in this sphere.

At the same time, comparative legal analysis reveals substantial differentiation in the scope of criminalization: unlike Russian legislation, which provides for a specialized offence of unlawful termination or restriction of electric power supply (Article 215.1 of the Criminal Code of the Russian Federation), Kazakh criminal law does not contain an analogous provision. This circumstance reflects differences in doctrinal approaches to defining the boundaries of criminal law intervention in the energy sector: whereas the Russian legislator regards the continuity of energy supply as an independent object of criminal law protection, the Kazakh model is limited to protection against technological threats at critical infrastructure facilities.

The Republic of Uzbekistan has adopted a fundamentally different approach to the criminalization of unlawful use of energy resources, integrating the relevant offences into the system of provisions on crimes against property. By Law No. 822 of 13 March 2023, Article 169 of the Criminal Code of the Republic of Uzbekistan (theft) was supplemented with special aggravating elements: subparagraph “d” of part two provides for liability for theft committed for commercial purposes through unauthorized connection to public electric, thermal, gas, or water supply networks or through intentional interference with metering devices. Thus, the Uzbek legislator declined to construct an independent offence in the energy sector, qualifying such acts as a form of larceny of another’s property.

The differentiation of criminal liability is carried out depending on the amount of damage caused: the basic aggravated form of the offence provides for a fine of up to 300 Base Calculation Units or imprisonment for a term of three to five years; theft on a large scale (part three) entails imprisonment for a term of five to eight years; theft on an especially large scale (part four) entails imprisonment for a term of eight to fifteen years.

A characteristic feature of the Uzbek model is the entrenchment of the institution of active repentance in relation to this category of offences: a first-time offender is subject to exemption from criminal liability on condition of full compensation of the damage caused within thirty days from the moment of discovery of the offence. This provision reflects the legislator’s conceptual orientation toward a restorative model of justice and economic expediency in the sphere of combating theft of energy resources.

The modernization of criminal law regulation of industrial safety in the PRC was marked by the adoption of Amendment XI to the Criminal Code (which entered into force on 1 March 2021), which substantially expanded the scope of criminalization in this sphere. A conceptual innovation was the introduction of Article 134-1 of the Criminal Code of the PRC, which established the construction of an offence of concrete danger: the legislator for the first time established criminal liability for acts creating a real threat of serious consequences occurring, regardless of whether such consequences actually occurred.

The objective element of this offence encompasses three alternative forms of conduct: first, the disabling or destruction of industrial monitoring, warning, protection, and rescue equipment systems, as well as the falsification, concealment, or destruction of relevant data; second, failure to comply with directives of competent authorities to suspend operations or eliminate emergency threats in the presence of substantial risk factors; third, conducting high-risk activities (mining, metallurgical production, construction, handling of hazardous substances) without proper authorization. The sanction under this article provides for imprisonment for a term of up to one year, criminal detention, or public surveillance.

In the sphere of combating theft of energy resources, the Chinese legislator has adopted a model of qualification through general provisions on crimes against property. Unlawful consumption of electric power is qualified under Article 264 of the Criminal Code of the PRC (theft), reflecting a doctrinal approach that recognizes electric energy as an independent object of property legal relations. Article 71 of the PRC Law “On Electric Power Industry” establishes a two-tier system of liability: administrative (recovery of the cost of consumed energy and a fine of up to five times the cost) and criminal (in the presence of elements of an offence). The threshold for criminalization is determined by the Joint Interpretation of the Supreme People’s Court and the Supreme People’s Procuratorate of 2013, according to which a “relatively large amount” ranges from 1,000 to 3,000 yuan, with the specific threshold value being established by provincial judicial authorities taking into account the level of economic development of the respective region.

The comparative legal analysis of the criminal legislation of SCO member states conducted in this study enables the conclusion that there exist three conceptually distinct models of criminalization of acts in the energy sector. The Russian model is characterized by the highest degree of differentiation of criminal law protection, incorporating a system of specialized offences covering both technological threats at energy infrastructure facilities (Articles 215, 215.2, 215.3 of the Criminal Code of the Russian Federation) and encroachments on the continuity of energy supply to consumers (Article 215.1 of the Criminal Code of the Russian Federation). The Kazakh legislator, while maintaining conceptual continuity with the Russian approach in terms of protecting critical infrastructure facilities, nevertheless limits the scope of criminalization to technological risks, without distinguishing disruption of energy supply as an independent offence. The Uzbek and Chinese models demonstrate a different doctrinal approach, integrating liability for theft of energy resources into the system of provisions on crimes against property, with the Uzbek legislator emphasizing the restorative orientation of criminal policy through the institution of active repentance, while the Chinese legislator emphasizes the preventive function through the criminalization of offences of concrete danger in the sphere of industrial safety. The differentiation identified reflects both differences in national legal traditions and the specific criminal policy priorities of each state in the sphere of ensuring energy security.

CONCLUSIONS

As The comparative legal study of the institution of legal liability for violations of energy legislation in SCO member states conducted in this article enables the formulation of a number of theoretical conclusions and practical recommendations.

First, the analysis of the regulatory framework of the Russian Federation, the Republic of Kazakhstan, the Republic of Uzbekistan, and the People's Republic of China demonstrates the formation in each of the states under consideration of a coherent system of legal liability encompassing administrative law, criminal law, civil law, and disciplinary mechanisms for responding to offences in the energy sector. At the same time, a general trend toward stricter liability for the most socially dangerous acts has been identified, which is reflected in the legislative reforms of 2021–2025 across all the jurisdictions examined.

Second, the comparative analysis has enabled the identification of three conceptually distinct models of criminalization of acts in the energy sector: the Russian model of maximum differentiation featuring a system of specialized offences; the Kazakh model of limited criminalization focused on the protection of critical infrastructure facilities; and the Uzbek-Chinese model of integrating liability for energy offences into the system of provisions on crimes against property. Each of these models possesses certain advantages: the Russian model ensures the most comprehensive criminal law protection of energy relations, the Uzbek model emphasizes the restorative function through the institution of active repentance, and the Chinese model places emphasis on the preventive function through the criminalization of offences of concrete danger.

Third, the study has revealed significant potential for the harmonization of legal regulation within the SCO framework. The common historical-legal genesis of the post-Soviet states, their affiliation with the continental legal family, and the uniformity of basic approaches to determining the subject composition of liability create objective prerequisites for the convergence of national legislation [15]. At the same time, complete unification appears inadvisable, since the national specificities of legal regulation reflect the particular features of the energy balance, the structure of the fuel and energy complex, and the state policy priorities of each state.

On the basis of this study, it appears possible to formulate the following practical recommendations:

1. For the purpose of improving national legislation, it would be advisable for SCO member states to consider adopting the most effective legal constructs: the institution of active repentance in cases of theft of energy resources (the Uzbek experience), offences of concrete danger in the sphere of industrial safety (the Chinese experience), and a differentiated system of specialized offences (the Russian experience).
2. Within the SCO framework, the development of a model act or recommendations on the harmonization of liability for offences in the energy sector appears justified, which could serve as a guideline for national legislators in improving domestic legislation.
3. A pressing task is the establishment of mechanisms for the exchange of law enforcement practice among SCO member states in the sphere of combating energy offences, which would enable the identification of the most effective approaches to ensuring energy security.

The scholarly significance of this study lies in the fact that it fills an existing gap in comparative legal research on the institution of liability in the energy sector as applied to SCO member states. The patterns identified and the

conclusions formulated may be utilized in further scholarly research on energy law issues, as well as in the development of academic courses on comparative law and energy law.

Future research directions include expanding the geographical scope of the comparative analysis through the inclusion of other SCO member states (the Republic of India, the Islamic Republic of Iran, and the Islamic Republic of Pakistan), an in-depth study of law enforcement practice and judicial statistics, as well as research into the impact of digitalization of the energy sector on the transformation of the institution of legal liability.

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