



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

GREEN ECONOMY AND DEVELOPMENT

Social, Economic, Technological, Scientific and Popular Science Journal

2026-YIL / SENTABR /
9-SON, III-QISM



ISSN: 2992-8982

<https://yashil-iqtisodiyot-taraqqiyot.uz/>



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Bosh muharrir:

Sharipov Kongiratbay Avezimbetovich

*Elektron nashr. 2026-yil, sentabr.
III-qism*

Bosh muharrir o'rinbosari:

Karimov Norboy G'aniyevich

Muharrir:

Qurbonov Sherzod Ismatillayevich

Tahrir hay'ati:

Salimov Oqil Umrzoqovich, O'zbekiston Fanlar akademiyasi akademigi
Abduraxmanov Kalandar Xodjayevich, O'zbekiston Fanlar akademiyasi akademigi
Sharipov Kongiratbay Avezimbetovich, texnika fanlari doktori (DSc), professor
Rae Kvon Chung, Janubiy Koreya, TDIU faxriy professori, "Nobel" mukofoti laureati
Osman Mesten, Turkiya parlamenti a'zosi, Turkiya – O'zbekiston do'stlik jamiyati rahbari
Axmedov Durbek Kudratillayevich, iqtisodiyot fanlari doktori (DSc), professor
Axmedov Sayfullo Normatovich, iqtisodiyot fanlari doktori (DSc), professor
Abduraxmanova Gulnora Kalandarovna, iqtisodiyot fanlari doktori (DSc), professor
Kalonov Muxiddin Baxritdinovich, iqtisodiyot fanlari doktori (DSc), professor
Siddiqova Sadoqat G'afforovna, pedagogika fanlari bo'yicha falsafa doktori (PhD)
Xudoyqulov Sadirdin Karimovich, iqtisodiyot fanlari doktori (DSc), professor
Maxmudov Nosir, iqtisodiyot fanlari doktori (DSc), professor
Yuldashev Mutallib Ibragimovich, iqtisodiyot fanlari doktori (DSc), professor
Samadov Asqarjon Nishonovich, iqtisodiyot fanlari nomzodi, professor
Slizovskiy Dimitriy Yegorovich, texnika fanlari doktori (DSc), professor
Mustafakulov Sherzod Igamberdiyevich, iqtisodiyot fanlari doktori (DSc), professor
Axmedov Ikrom Akramovich, iqtisodiyot fanlari doktori (DSc), professor
Eshtayev Alisher Abdug'aniyevich, iqtisodiyot fanlari doktori (DSc), professor
Xajiyev Baxtiyor Dushaboyevich, iqtisodiyot fanlari doktori (DSc), professor
Hakimov Nazar Hakimovich, falsafa fanlari doktori (DSc), professor
Musayeva Shoirazimovna, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), professor
Ali Konak (Ali Ko'nak), iqtisodiyot fanlari doktori (DSc), professor (Turkiya)
Cham Tat Huei, falsafa fanlari doktori (PhD), professor (Malayziya)
Foziljonov Ibrohimjon Sotvoldixo'ja o'g'li, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dots.
Faxridinov Zafarjon Faxridin o'g'li, O'zb. Res. Bosh prokuraturasi HIJQKD boshqarma boshlig'i
Utayev Uktam Choriyevich, Anijon viloyati prokurorining o'rinbosari
Ochilov Farkhod, O'zb. Res. Bosh prokuraturasi IJQK Departamentining Namangan viloyati boshqarmasi boshlig'i
Buzrukhonov Sarvarxon Munavvarxonovich, iqtisodiyot fanlari nomzodi, dotsent
Axmedov Javohir Jamolovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)
Toxirov Jaloliddin Ochil o'g'li, texnika fanlari bo'yicha falsafa doktori (PhD), katta o'qituvchi
Bobobekov Ergash Abdumalikovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), v.b. dots.
Djudi Smetana, pedagogika fanlari nomzodi, dotsent (AQSH)
Krissi Lyuis, pedagogika fanlari nomzodi, dotsent (AQSH)
Glazova Marina Viktorovna, Iqtisodiyot fanlari doktori (Moskva)
Nosirova Nargiza Jamoliddin qizi, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Sevil Piriyeva Karaman, falsafa fanlari doktori (PhD) (Turkiya)
Mirzaliyev Sanjar Makhamatjon o'g'li, TDIU ITI departamenti rahbari
Ochilov Bobur Baxtiyor o'g'li, TDIU katta o'qituvchisi
Golisheva Yelena Vyacheslavovna, Iqtisodiyot fanlari nomzodi, dotsent.
Abdukarimova Dinara Rustamxonovna, bank-moliya akademiyasi professori, DSc., professor.
Ikramov Murod Akramovich, iqtisodiyot fanlari doktori (DSc), professor
Nazarova Ra'no Rustamovna, iqtisodiyot fanlari doktori (DSc), professor



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Editorial board:

Salimov Okil Umrzokovich, Academician of the Academy of Sciences of Uzbekistan
Abdurakhmanov Kalandar Khodjayevich, Academician of the Academy of Sciences of Uzbekistan
Sharipov Kongirاتبay Avezimbetovich, Doctor of Technical Sciences (DSc), Professor
Rae Kwon Chung, South Korea, Honorary Professor at TSUE, Nobel Prize Laureate
Osman Mesten, Member of the Turkish Parliament, Head of the Turkey–Uzbekistan Friendship Society
Akhmedov Durbek Kudratillayevich, Doctor of Economic Sciences (DSc), Professor
Akhmedov Sayfullo Normatovich, Doctor of Economic Sciences (DSc), Professor
Abdurakhmanova Gulnora Kalandarovna, Doctor of Economic Sciences (DSc), Professor
Kalonov Mukhiddin Bakhridinovich, Doctor of Economic Sciences (DSc), Professor
Siddikova Sadokat Gafforovna, Doctor of Philosophy (PhD) in Pedagogical Sciences
Khudoykulov Sadirdin Karimovich, Doctor of Economic Sciences (DSc), Professor
Makhmudov Nosir, Doctor of Economic Sciences (DSc), Professor
Yuldashev Mutallib Ibragimovich, Doctor of Economic Sciences (DSc), Professor
Samadov Askarjon Nishonovich, Candidate of Economic Sciences, Professor
Slizovskiy Dmitriy Yegorovich, Doctor of Technical Sciences (DSc), Professor
Mustafakulov Sherzod Igamberdiyevich, Doctor of Economic Sciences (DSc), Professor
Akhmedov Ikrom Akramovich, Doctor of Economic Sciences (DSc), Professor
Eshtayev Alisher Abduganiyevich, Doctor of Economic Sciences (DSc), Professor
Khajiyev Bakhtiyor Dushaboyevich, Doctor of Economic Sciences (DSc), Professor
Khakimov Nazar Khakimovich, Doctor of Philosophy (DSc), Professor
Musayeva Shoira Azimovna, Doctor of Philosophy (PhD) in Economic Sciences, Professor
Ali Konak, Doctor of Economic Sciences (DSc), Professor (Turkey)
Cham Tat Huei, Doctor of Philosophy (PhD), Professor (Malaysia)
Foziljonov Ibrokhimjon Sotvoldikhoja ugli, Doctor of Philosophy (PhD) in Economic Sciences, Associate Professor
Fakhridinov Zafarjon Fakhridin ogli, Head of the DCEC under the Prosecutor General's Office of the Rep. of Uzb.
Utayev Uktam Choriyevich, Deputy Prosecutor of Anijan Region
Ochilov Farkhod, Head of the Namangan Regional Department of the Department of Internal Affairs of Rep. of Uzb.
Buzrukkhonov Sarvarkhon Munavvarkhonovich, Candidate of Economic Sciences, Associate Professor
Akhmedov Javokhir Jamolovich, Doctor of Philosophy (PhD) in Economic Sciences
Tokhirov Jaloliddin Ochil ugli, Doctor of Philosophy (PhD) in Technical Sciences, Senior Lecturer
Bobobekov Ergash Abdumalikovich, Doctor of Philosophy (PhD) in Economic Sciences, Acting Associate Professor
Judi Smetana, Candidate of Pedagogical Sciences, Associate Professor (USA)
Chrissy Lewis, Candidate of Pedagogical Sciences, Associate Professor (USA)
Glazova Marina Victorovna, Doctor of Sciences in Economics (Moscow)
Nosirova Nargiza Jamoliddin kizi, Doctor of Philosophy (PhD) in Economic Sciences, Associate Professor
Sevil Piriyea Karaman, Doctor of Philosophy (PhD) (Turkey)
Mirzaliyev Sanjar Makhamatjon ugli, Head of the Department of Scientific Research and Innovations, TSUE
Ochilov Bobur Bakhtiyor ugli, Senior lecturer at TSUI
Golisheva Yelena Vyacheslavovna, Candidate of Economic Sciences, Associate Professor.
Abdukariyeva Dinara Rustamkhanovna, Doctor of Economic Sciences (DSc), Professor
Ikramov Murod Akramovich, Doctor of Economic Sciences (DSc), Professor
Nazarova Ra'no Rustamovna, Doctor of Economic Sciences (DSc), Professor

Ekspertlar kengashi:

Berkinov Bazarbay, iqtisodiyot fanlari doktori (DSc), professor
Po'latov Baxtiyor Alimovich, texnika fanlari doktori (DSc), professor
Aliyev Bekdavat Aliyevich, falsafa fanlari doktori (DSc), professor
Isakov Janabay Yakubbayevich, iqtisodiyot fanlari doktori (DSc), professor
Xalikov Suyun Ravshanovich, iqtisodiyot fanlari nomzodi, dotsent
Rustamov Ilhomiddin, iqtisodiyot fanlari nomzodi, dotsent
Hakimov Ziyodulla Ahmadovich, iqtisodiyot fanlari doktori, dotsent
Kamilova Iroda Xusniddinovna, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)
G'afurov Doniyor Orifovich, pedagogika fanlari bo'yicha falsafa doktori (PhD)
Fayziyev Oybek Raximovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Tuxtabayev Jamshid Sharafetdinovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Xamidova Faridaxon Abdulkarim qizi, iqtisodiyot fanlari doktori, dotsent
Yaxshiboyeva Laylo Abdisattorovna, katta o'qituvchi
Babayeva Zuhra Yuldashevna, mustaqil tadqiqotchi
Komilova Nilufar Karshiboyevna, Geografiya fanlari doktori, professori
Umirzoqov Ja'sur Artiqboy o'g'li, iqtisodiyot fanlari doktori (DSc), dotsent
Zebo Kuldasheva, iqtisodiyot fanlari doktori (DSc), dotsent

Board of Experts:

Berkinov Bazarbay, Doctor of Economic Sciences (DSc), Professor
Pulatov Bakhtiyor Alimovich, Doctor of Technical Sciences (DSc), Professor
Aliyev Bekdavat Aliyevich, Doctor of Philosophy (DSc), Professor
Isakov Janabay Yakubbayevich, Doctor of Economic Sciences (DSc), Professor
Khalikov Suyun Ravshanovich, Candidate of Economic Sciences, Associate Professor
Rustamov Ilhomiddin, Candidate of Economic Sciences, Associate Professor
Khakimov Ziyodulla Akhmadovich, Doctor of Economic Sciences, Associate Professor
Kamilova Iroda Xusniddinovna, Doctor of Philosophy (PhD) in Economics
Gafurov Doniyor Orifovich, Doctor of Philosophy (PhD) in Pedagogy
Fayziyev Oybek Raximovich, Doctor of Philosophy (PhD) in Economics, Associate Professor
Tukhtabayev Jamshid Sharafetdinovich, Doctor of Philosophy (PhD) in Economics, Associate Professor
Khamidova Faridaxon Abdulkarimovna, Doctor of Economic Sciences, Associate Professor
Yakhshiboyeva Laylo Abdisattorovna, Senior Lecturer
Babayeva Zuhra Yuldashevna, Independent Researcher
Komilova Nilufar Karshiboyevna, Doctor of Geographical Sciences, Professor
Umirzokov Jasur Artiqboy ugli, Doctor of Economic Sciences (DSc), Associate Professor
Zebo Kuldasheva, Doctor of Economic Sciences (DSc), Associate Professor

- 08.00.01 Iqtisodiyot nazariyasi
- 08.00.02 Makroiqtisodiyot
- 08.00.03 Sanoat iqtisodiyoti
- 08.00.04 Qishloq xo'jaligi iqtisodiyoti
- 08.00.05 Xizmat ko'rsatish tarmoqlari iqtisodiyoti
- 08.00.06 Ekonometrika va statistika
- 08.00.07 Moliya, pul muomalasi va kredit
- 08.00.08 Buxgalteriya hisobi, iqtisodiy tahlil va audit
- 08.00.09 Jahon iqtisodiyoti
- 08.00.10 Demografiya. Mehnat iqtisodiyoti
- 08.00.11 Marketing
- 08.00.12 Mintaqaviy iqtisodiyot
- 08.00.13 Menejment
- 08.00.14 Iqtisodiyotda axborot tizimlari va texnologiyalari
- 08.00.15 Tadbirkorlik va kichik biznes iqtisodiyoti
- 08.00.16 Raqamli iqtisodiyot va xalqaro raqamli integratsiya
- 08.00.17 Turizm va mehmonxona faoliyati

Muassis: "Ma'rifat-print-media" MChJ

Hamkorlarimiz: Toshkent davlat iqtisodiyot universiteti,
O'zbekiston Respublikasi Bosh prokuraturasi huzuridagi Iqtisodiy
jinoyatlarga qarshi kurashish departamenti

Jurnalning ilmiyligi:

“Yashil” iqtisodiyot va
taraqqiyot” jurnali

O'zbekiston Respublikasi
Oliy ta'lim, fan va innovatsiyalar
vazirligi huzuridagi Oliy
attestatsiya komissiyasi
rayosatining
2023-yil 1-apreldagi
336/3-sonli qarori bilan
ro'yxatdan o'tkazilgan.



MUNDARIJA

DUAL TA'LIM ASOSIDA TEXNIKA FANLARINI O'QITISH METODIKASINI TAKOMILLASHTIRISH: ELEKTR ENERGETIKASI TA'LIMI MISOLIDA.....	14
Zoxidov Ikboljon Zokirjonovich	
KICHIK BIZNESDA RAQAMLI MARKETING VOSITALARINING SAVDO HAJMINI OSHIRISHDAGI IQTISODIY SAMARADORLIGI.....	20
Raxmonova Feruza Musakulovna	
MOLIYALASHTIRISHDA DAVLAT ARALASHUVINING IQTISODIY ASOSLARI	27
Yerjanov Shohrux Kabil o'g'li	
ОЦЕНКА ВЛИЯНИЯ СЕЛЬСКОХОЗЯЙСТВЕННЫХ РИСКОВ НА ПРОДОВОЛЬСТВЕННУЮ БЕЗОПАСНОСТЬ РЕСПУБЛИКИ УЗБЕКИСТАН.....	34
Нуруллаева Гулнара Коптлеуовна	
KORPORATIV BOSHQARUVDA NOMOLIYAVIY HISOBOT TIZIMINI RIVOJLANTIRISHNING ASOSIY YO'NALISHLARI.....	39
Akmaljon Valijonov	
BYUDJET TASHKILOTLARIDA DEBITORLIK VA KREDITORLIK QARZLARINING HISOB, NAZORAT VA ICHKI AUDIT OBYEKTI SIFATIDAGI IQTISODIY MAZMUNI	43
Abdulazizov Aziz Anvar o'g'li	
MAMLAKATIMIZ KOMPANIYALARI BOSHQARUV JARAYONLARIDA RAQAMLI TEKNOLOGIYALARDAN SAMARALI FOYDALANISHDAGI MUAMMOLAR.....	49
To'ychiboyev Nozimjon Soliyevich	
TIJORAT BANKLARIGA KAPITAL BOZORI ORQALI INVESTITSİYALARNI JALB QILISH YO'LLARI.....	58
Qurbonova Vazira Ravshan qizi	
MEVA-SABZAVOTCHILIK KOOPERATSIYALARINI MOLIYALASHTIRISH MEXANIZMINI BAHOLASHNING INSTITUTSIONAL-MOLIYAVIY INTEGRAL INDEKSI	62
Bobonova Shahnoza Otaxonovna	
DUNYODA KAMBAG'ALLIKNI QISQARTIRISHNING ZAMONAVIY STRATEGIYALARI	69
Mirzamahmudova Madina Odiljon qizi	
ЗАРУБЕЖНЫЙ ОПЫТ УПРАВЛЕНИЯ РАЗВИТИЕМ ЗЕЛЁНОЙ ЭКОНОМИКИ НА РЕГИОНАЛЬНОМ УРОВНЕ: СРАВНИТЕЛЬНЫЙ АНАЛИЗ И ВОЗМОЖНОСТИ АДАПТАЦИИ В УЗБЕКИСТАНЕ.....	73
Муминжонов Анварбек Сайфитдин угли	
ANSWERING BUYER CARBON-DATA REQUESTS: A MINIMUM ACCOUNTING CONTOUR FOR SECOND-TIER EXPORTERS IN EMERGING ECONOMIES.....	82
Mukhammadiyaminova Shakhzoda Sherzodovna	



ANSWERING BUYER CARBON-DATA REQUESTS: A MINIMUM ACCOUNTING CONTOUR FOR SECOND-TIER EXPORTERS IN EMERGING ECONOMIES

Mukhammadiyaminova Shakhzoda Sherzodovna

Doctoral Student, Tashkent State University of Economics

ORCID: 0000-0002-9547-3892

Abstract: Exporters in emerging economies increasingly receive greenhouse-gas data requests not from regulators but from their customers, who need supplier figures to complete their own value-chain inventories. Two instruments adopted in 2026 reshape this pressure in opposite directions. Directive (EU) 2026/470 introduced a value chain cap limiting the sustainability information that companies within the scope of the Corporate Sustainability Reporting Directive may require from counterparties with 1,000 or fewer employees, and on 3 July 2026 the European Commission adopted the corresponding voluntary standard as a delegated act. Simultaneously, the Greenhouse Gas Protocol's Scope 3 revision, published as a Phase 1 progress update on 31 March 2026, proposes to make Scope 3 a required component of a conforming inventory, to require at least 95 per cent coverage, and to withdraw the method by which a purchase footprint is estimated from a diversified supplier's company-wide data.

This article analyses what the combination means for a second-tier supplier located outside the European Union, using an Uzbek textile component manufacturer as an illustrative case. Three findings follow from a structured reading of the instruments. First, the cap limits volume but not specificity, while the accounting revision raises specificity: the supplier faces fewer but more demanding questions. Second, the cap binds the buyer rather than conferring a right on the supplier, and applies only to requests made for the purpose of reporting under the directive; requests arising from lending, due diligence, product compliance or ordinary procurement fall outside it, and these channels account for most requests reaching a non-EU supplier. Third, the data required to answer a compliant request is already held by such a firm in dispersed form. The article specifies a minimum accounting contour of eleven data items, each mapped to an existing internal record, and argues that the binding constraint is organisational rather than technical.

Keywords: Scope 3 emissions; value chain cap; VSME; CSRD; supplier carbon data; SME exporters; carbon accounting; textile industry; Uzbekistan.

Annotatsiya: Rivojlanayotgan iqtisodiyotlardagi eksportchilar issiqxona gazlari bo'yicha ma'lumot so'rovlarini tobora ko'proq tartibga soluvchi organlardan emas, balki o'z xaridorlaridan oladilar. 2026-yilda qabul qilingan ikki hujjat bu bosimni qarama-qarshi yo'nalishlarda o'zgartirdi. (Yel) 2026/470-sonli Direktiva qiymat zanjiri chegarasini joriy etdi: CSRD doirasidagi kompaniyalar xodimlari soni 1 000 tadan oshmaydigan kontragentlardan talab qilishi mumkin bo'lgan ma'lumot hajmi cheklandi; 2026-yil 3-iyulda Yevropa Komissiyasi tegishli ixtiyoriy standartni delegatsiyalangan akt sifatida qabul qildi. Ayni paytda GHG Protocol 2026-yil 31-martdagi hisobotida Scope 3 ni majburiy tarkibiy qism qilish, kamida 95 foiz qamrovni talab qilish va yetkazib beruvchining umumiy korxona ma'lumotlari asosida hisoblash usulini bekor qilishni taklif qildi.

Maqolada ushbu kombinatsiya Yevropa Ittifoqidan tashqarida joylashgan ikkinchi darajali yetkazib beruvchi uchun nimani anglatishi tahlil qilinadi. Uch xulosa olindi. Birinchidan, chegara so'rovlar hajmini cheklaydi, biroq ularning aniqligini emas; hisob uslubiyaatidagi o'zgarish esa aniqlikni oshiradi — natijada savollar kamayadi, lekin murakkablashadi. Ikkinchidan, chegara yetkazib beruvchiga huquq bermaydi, balki xaridorni majburlaydi va faqat CSRD hisoboti maqsadidagi so'rovlarga taalluqlidir; kreditlash, due diligence, mahsulot muvofiqi va oddiy xaridlar bo'yicha so'rovlar undan tashqarida qoladi. Uchinchidan, talab qilinadigan ma'lumotlar bunday korxonada allaqachon mavjud, ammo tarqoq holatda. Maqolada o'n bitta ma'lumot bandidan iborat minimal hisob konturi taklif etiladi.

Kalit so'zlar: Scope 3 emissiyalari; qiymat zanjiri chegarasi; VSME; CSRD; yetkazib beruvchi uglerod ma'lumotlari; kichik va o'rta eksportchilar; uglerod hisobi; to'qimachilik sanoati; O'zbekiston.



Аннотация: Экспортёры в развивающихся экономиках всё чаще получают запросы о выбросах не от регулятора, а от своих покупателей, которым данные поставщика нужны для собственной инвентаризации цепочки создания стоимости. Два инструмента, принятые в 2026 году, меняют это давление в противоположных направлениях. Директива (ЕС) 2026/470 ввела предел для цепочки создания стоимости, ограничивающий объём информации, которую компании в сфере действия CSRD вправе требовать от контрагентов с численностью до 1000 человек; 3 июля 2026 года комиссия приняла соответствующий добровольный стандарт делегированным актом. Одновременно GHG Protocol в отчёте от 31 марта 2026 года предложил сделать Scope 3 обязательной частью инвентаризации, требовать охвата не менее 95 процентов и отозвать метод расчёта следа закупки по общефирменным данным поставщика.

В статье анализируется, что это сочетание означает для поставщика второго эшелона, расположенного вне ЕС. Получены три результата. Предел ограничивает объём запросов, но не их требовательность, тогда как пересмотр методологии требовательность повышает. Предел связывает покупателя, а не наделяет правом поставщика, и действует только в отношении запросов для целей отчётности по CSRD; запросы в рамках кредитования, комплаенса и обычных закупок остаются за его пределами. Наконец, необходимые данные у такого предприятия уже есть, но в разрозненном виде; предложен минимальный учётный контур из одиннадцати позиций.

Ключевые слова: выбросы Scope 3; предел цепочки создания стоимости; VSME; CSRD; углеродные данные поставщика; малые экспортёры; углеродный учёт; текстильная промышленность; Узбекистан.

INTRODUCTION

For most manufacturers in emerging economies, climate regulation does not arrive through domestic law. It arrives through a customer's procurement department. A European or Turkish buyer subject to mandatory sustainability reporting must quantify the emissions embedded in what it purchases, and to do so it turns to its suppliers. The supplier is not regulated, faces no domestic obligation, and yet must answer, because the alternative is losing the contract.

Uzbekistan's textile sector sits squarely in this position. Exports of textile and garment products exceeded USD 3.9 billion in 2023, roughly a tenfold increase over a decade, and nearly all domestically grown cotton is now processed within the country [1]. Growth of this kind embeds Uzbek producers ever more deeply in buyer-led value chains, and with that comes exposure to whatever reporting obligations those buyers carry. The exposure is indirect but real: a firm outside the scope of any European directive can still be required, contractually, to supply the data that directive generates.

One clarification is necessary at the outset, because the point is frequently misstated in the regional literature. The European Union's Carbon Border Adjustment Mechanism does not cover textiles. Its scope is confined to cement, iron and steel, aluminium, fertilisers, electricity and hydrogen. Pressure on textile exporters travels by a different route entirely, through the reporting obligations of buyers and the procurement requirements that follow from them, and conflating the two leads to preparing for the wrong instrument.

That route was substantially reconfigured during 2026, and in a way that is easy to misread. Directive (EU) 2026/470 raised the threshold for mandatory reporting and introduced a value chain cap limiting what reporting companies may require from smaller counterparties; on 3 July 2026 the Commission adopted the corresponding standard as a delegated act [2; 3; 4]. Read alone, this looks like relief for suppliers. Read alongside the concurrent revision of greenhouse-gas accounting methodology [5], it looks different. This article asks what the combination actually requires of a second-tier supplier outside the European Union, and what minimum accounting arrangement allows such a firm to answer a compliant request without consultants or dedicated software.

REVIEW OF LITERATURE ON THE SUBJECT

Value-chain emissions dominate corporate carbon inventories, and their measurement depends on information the reporting company does not itself hold. Hettler and Graf-Vlachy, in a systematic review of Scope 3 reporting, identify data availability from suppliers as the central unresolved constraint and note that the literature has concentrated on reporting firms rather than on the suppliers from whom data is sought [6]. Isil



and Sebastianelli show that carbon awareness is distributed unevenly along value chains, concentrating at the buyer end [7]. The asymmetry matters: the party that must act is not the party that must report.

Evidence on suppliers themselves is thinner but consistent. Studies of small and medium-sized enterprises identify resource constraints, absent technical expertise and the absence of any domestic obligation as the principal barriers to emissions measurement [8; 9]. A recent transaction-based study covering more than 150,000 UK firms found Scope 3 to be rarely measured and poorly understood among smaller enterprises, and proposed spend-based estimation precisely because primary measurement is out of reach [10]. Qualitative work on supplier readiness reaches similar conclusions, adding that firms respond to customer requirements rather than to regulation [11].

The transmission mechanism itself has recently been tested empirically. Using the introduction of European and United States disclosure rules as a quasi-natural experiment, a study of Chinese suppliers found measurable changes in supplier carbon behaviour attributable to their customers' regulatory obligations, with stronger effects where supply-chain dependency was higher [12]. This is direct evidence that disclosure regimes propagate across borders to firms they do not formally govern, the mechanism this article examines in the Central Asian context.

What the literature does not address is the position of the second-tier supplier in a non-EU emerging economy after the 2026 reconfiguration. The instruments are too recent, and the analytical work available on them is practitioner commentary rather than research. This article addresses that gap.

RESEARCH METHODOLOGY

The analysis proceeds in three steps. First, a structured reading of the primary instruments: Directive (EU) 2026/470, the Commission delegated act of 3 July 2026 adopting the voluntary standard, the Commission's explanatory material on the value chain cap of 6 May 2026, the Commission Recommendation of 30 July 2025, and the Greenhouse Gas Protocol Scope 3 Standard together with its Phase 1 revision update of 31 March 2026 [2; 3; 4; 5; 13; 14]. Only official texts and the issuing bodies' own explanatory publications are treated as authoritative; practitioner commentary is used to locate documents, not as evidence.

Second, the requirements arising from these instruments are mapped against the records that a second-tier textile exporter already maintains. The mapping uses as its reference case an Uzbek manufacturer of cylindrical bobbin and tube products supplying seven markets, whose export-shipment register, invoice records and utility documentation were examined in earlier work by the author [15]. The firm is used illustratively: the question is not what this enterprise emits, which is not measured here, but which of the data items a compliant response requires are already present in records it keeps for other reasons.

Third, a minimum accounting contour is specified: the smallest set of data items sufficient to answer a request falling within the cap, each item paired with its existing internal source and the standard that governs its calculation. Two boundaries of the analysis should be stated. No emissions are computed, because the underlying activity data has not been collected; the article specifies what would have to be collected. And the proposed revisions to the Greenhouse Gas Protocol are treated throughout as proposals, not as adopted requirements, since a public consultation draft and final adoption remain outstanding [5].

ANALYSIS AND RESULTS

The 2026 reconfiguration. Directive (EU) 2026/470, published in the Official Journal on 26 February 2026 and in force from 18 March 2026, narrowed mandatory reporting to companies exceeding both 1,000 employees and EUR 450 million in net turnover, with first reports under the revised regime expected in 2028 covering financial year 2027 [2]. For suppliers the material provision is the value chain cap, which prohibits companies within scope from requiring counterparties with 1,000 or fewer employees to provide sustainability information beyond the content of the voluntary standard. On 3 July 2026 the Commission adopted that standard as a delegated act, converting a non-binding recommendation into binding law [3; 4].

Three features of the cap determine its practical reach, and each is stated explicitly in the Commission's own explanatory material. The cap prohibits requiring, not requesting: a reporting company may still ask for more, but must identify which items exceed the cap and inform the counterparty of its right to decline [13]. The cap applies only where the request serves the purpose of sustainability reporting under the directive, and does not affect requests made for other purposes [13]. And the obligation falls on the reporting company; the standard remains voluntary for the counterparty, which acquires a right to refuse rather than a duty to disclose [3].



Running against this, the Greenhouse Gas Protocol published a Phase 1 progress update on 31 March 2026 setting out the direction of the first substantial revision of the Scope 3 Standard since 2011. Three proposals bear directly on suppliers: Scope 3 would become a required component of a conforming corporate inventory rather than an optional one; reporting companies would be required to cover at least 95 per cent of required Scope 3 emissions and to quantify and justify exclusions; and the method permitting a purchase footprint to be estimated from a diversified supplier's company-wide emissions would be withdrawn, leaving supplier-specific data as the route to primary-data claims [5]. Figure 1 places the two tracks on a common timeline (Figure 1).

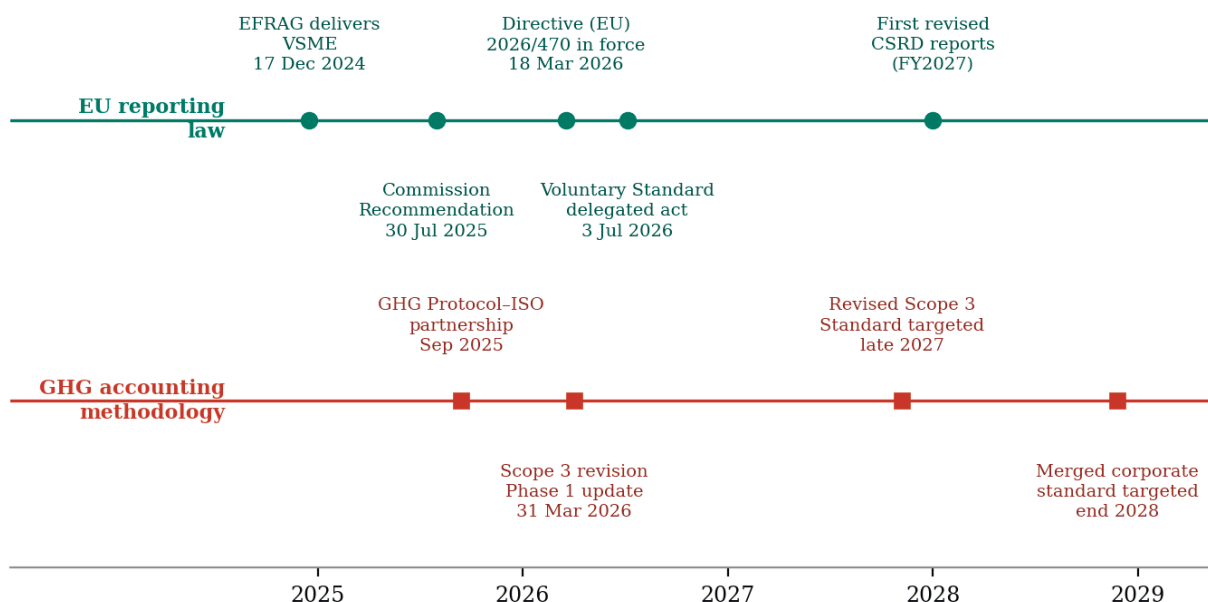


Figure 1. Two regulatory tracks, 2024–2028: EU reporting law narrowing the volume of permissible requests, greenhouse-gas accounting methodology raising their required specificity¹

The scissors effect. The two movements are not contradictory; they cut in different dimensions. The cap constrains volume: the number of distinct data points a reporting buyer may require of a small supplier is now bounded by a published list. The accounting revision constrains substitutability: where a buyer previously satisfied its own standard by applying industry averages or by apportioning a supplier's company-wide figure, the proposed withdrawal of that method leaves supplier-specific data as the only route to the data quality its inventory will require. The supplier therefore faces fewer questions, asked with greater insistence, about a narrower set of items that must now be specific rather than generic. An enterprise preparing only for a reduction in volume will be unprepared for the increase in specificity.

Why the cap provides meaningful protection for a non-EU supplier. For a supplier located outside the European Union, three advantages combine (Table 1). The cap is purpose-focused, and the majority of requests reaching an Uzbek textile exporter arise from buyer procurement policy, from bank and trade-finance due diligence, from product compliance and certification schemes, and from brand-level commitments that support responsible business practices. These provide opportunities for suppliers to demonstrate transparency and strengthen commercial relationships. The cap is also buyer-focused: it operates as a framework for companies subject to the directive, so a supplier's protection and opportunities depend on whether its particular customer is within scope, and the threshold increase to 1,000 employees enables many mid-sized buyers to adopt flexible and proportionate approaches, buyers who may continue developing their own responsible procurement practices. Finally, exercising a right to decline is a commercial decision supported by legal provisions. A second-tier supplier competing on reliability in a buyer's market is well placed to engage constructively with a customer's questionnaire, while European law provides a framework for managing information requests proportionately (Table 1).

Table 1.

¹ Compiled by the author from [2; 3; 4; 5; 14].



Channels through which carbon-data requests reach a non-EU second-tier supplier, and the applicability of the value chain cap²

Request channel	Originating obligation	Cap applies?	Practical consequence for the supplier
Buyer sustainability reporting	Directive (EU) 2026/470 and implementing standards	Yes, if buyer in scope	Volume bounded by the voluntary standard; right to decline items above the cap, which must be flagged by the buyer.
Buyer procurement policy	Contractual, voluntary	No	Unbounded in principle; governed by negotiating position rather than law.
Bank and trade-finance due diligence	Prudential and lender policy	No	Increasingly tied to credit terms; refusal carries financing cost.
Product compliance and certification	Separate legal and scheme requirements	No	Mandatory for market access where applicable; unaffected by the cap.
Corporate due diligence	Due diligence legislation and buyer codes	No	Distinct legal basis from reporting; separate analysis required.

The minimum accounting contour. The practical opportunity for such a firm is not whether to build a carbon-accounting function but what the smallest effective one contains. Table 2 sets out eleven data items sufficient to answer a request falling within the cap, each paired with the internal record in which it already exists and the standard governing its treatment. The central observation is that ten of the eleven are already held. What is available is not only data but also a foundation for structure: the items sit in separate registers maintained by separate people for separate purposes, and can be expressed in the units a buyer's inventory requires (Table 2).

Table 2.
Minimum accounting contour for a second-tier exporter: required items, existing internal sources and governing standards³

Data item	Existing internal source	Standard reference	Status
Electricity consumption, kWh/year	Utility invoices	GHG Protocol Scope 2	Held
Fuel consumption, own vehicles and boilers	Fuel purchase records	GHG Protocol Scope 1	Held
Grid emission factor	National / IEA published factor	GHG Protocol Scope 2	External
Production volume, units and tonnes	Production log	Allocation basis	Held
Purchased raw material, quantity and type	Procurement records	Scope 3 cat. 1	Held
Consignment weight, tonnes	Shipment register	ISO 14083	Held
Transport mode per corridor	Transport documents	ISO 14083	Held
Distance per corridor, km	Transport documents	ISO 14083	Held
Waste generated and routed	Waste disposal records	Scope 3 cat. 5	Held
Water withdrawal, m ³	Utility invoices	Voluntary standard, basic module	Held
Emissions intensity per unit of output	Derived from the above	Allocation	To be computed

Three implications follow. The contour requires no measurement equipment: every input is an administrative record already generated for tax, procurement or logistics purposes. It requires a single annual consolidation rather than continuous monitoring, since buyer requests are annual. And it produces, as a by-product, the intensity figure that makes the data usable internally, emissions per tonne of output, comparable across periods and across export corridors, which converts a compliance exercise into a management indicator. The binding constraint on such a firm is therefore organisational: assigning the consolidation to a named person on a defined annual cycle, not acquiring capability it lacks.

² Source: compiled by the author on the basis of [2; 3; 13].

³ Source: compiled by the author on the basis of [3; 14; 16] and the enterprise records described in [15].



CONCLUSIONS AND SUGGESTIONS

The 2026 reconfiguration of European sustainability reporting is widely read as relief for small suppliers. For a second-tier exporter outside the European Union the relief is narrower than it appears. The value chain cap bounds the volume of what a reporting buyer may require, but it binds the buyer rather than empowering the supplier, applies only to requests serving directive reporting, and leaves untouched the procurement, financing and compliance channels through which most requests actually arrive. Meanwhile the proposed revision of greenhouse-gas accounting methodology moves in the opposite direction, withdrawing the estimation methods that previously allowed buyers to proceed without supplier-specific figures.

At firm level, three recommendations follow. Export-oriented manufacturers should consolidate the eleven-item contour annually, assigning it to a named individual rather than to a function, since the items already exist and the failure mode is dispersion rather than absence. They should express results as intensity per unit of output rather than as absolute totals, because intensity is what buyers compare and what remains interpretable as production volumes change. And they should treat the voluntary standard as a response template rather than as an obligation, answering every questionnaire in its structure regardless of the requester, which converts a stream of heterogeneous requests into one annually maintained disclosure.

At policy level, Uzbekistan's export-support institutions could reduce the aggregate cost of this transition considerably by acting once on behalf of many firms. A published national grid emission factor, maintained annually and officially sourced, removes the single external input that individual exporters cannot generate themselves. A standard response template aligned to the voluntary standard, distributed through sectoral associations, would prevent several thousand enterprises from separately discovering the same requirements. Neither measure requires subsidy, and both address the coordination failure rather than the capability gap.

Two limitations bound these conclusions. The analysis is documentary: it establishes what the instruments require, not how buyers behave in practice, and the incidence of requests across Uzbek exporters remains unmeasured. And the accounting revision analysed here is at proposal stage; the final standard is targeted for late 2027 and its content may change [5]. Survey evidence on the volume, origin and content of carbon-data requests actually received by Uzbek exporters would be the natural next step, and would convert the argument advanced here into a testable proposition.

REFERENCES:

1. GIZ. A Textile Giant in the Making? Uzbekistan's Apparel Sector. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit, 2024.
2. Directive (EU) 2026/470 of the European Parliament and of the Council amending Directive 2013/34/EU and Directive (EU) 2022/2464 as regards sustainability reporting and due diligence requirements. Official Journal of the European Union, 26 February 2026.
3. European Commission. Commission Delegated Regulation adopting the sustainability reporting standard for voluntary use, C(2026) 5011 final. Brussels, 3 July 2026.
4. European Commission. Commission Recommendation of 30 July 2025 on a voluntary sustainability reporting standard for small and medium-sized undertakings (VSME). Brussels, 2025.
5. Greenhouse Gas Protocol. Scope 3 Standard Revisions: Phase 1 Progress Update. Washington, DC: World Resources Institute and WBCSD, 31 March 2026.
6. Hettler M., Graf-Vlachy L. Corporate scope 3 carbon emission reporting as an enabler of supply chain decarbonization: a systematic review and comprehensive research agenda // Business Strategy and the Environment. 2024. Vol. 33, № 2. P. 263–282.
7. Isil O., Sebastianelli R. Arcs of carbon awareness in the value chain and their antecedents // Business Strategy and the Environment. 2020. Vol. 29, № 2. P. 503–518.
8. Caldera H. T. S., Desha C., Dawes L. Evaluating the enablers and barriers for successful implementation of sustainable business practice in lean SMEs // Journal of Cleaner Production. 2019. Vol. 218. P. 575–590.
9. Menon R. R., Ravi V. Analysis of barriers of sustainable supply chain management: a case study from the electronics industry // Cleaner Logistics and Supply Chain. 2021. Vol. 3. Article 100026.
10. Phillpotts J. et al. Completing the SME carbon profile: scalable prediction of scope 3 emissions // Journal of Industrial Ecology. 2026.
11. Charting the NetZero quest: exploring the factors affecting UK SMEs' readiness to track supply chain emissions // International Journal of Logistics Research and Applications. 2025.
12. Carbon disclosure regulatory transmission in global supply chains: evidence of carbon emission from Chinese suppliers // Asia Pacific Journal of Management. 2025.



13. European Commission. Feedback on sustainability reporting standards: additional explanatory information regarding the value chain cap. Brussels, 6 May 2026.
14. Greenhouse Gas Protocol. Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Washington, DC: World Resources Institute and WBCSD, 2011.
15. Mukhammadiyaminova Sh. Sh. A weekly logistics-controlling system for export supply chains: corridor-level evidence from a textile exporter // Muhandislik va iqtisodiyot. 2026. № 6. P. 26–35.
16. ISO 14083:2023. Greenhouse gases, Quantification and reporting of greenhouse gas emissions arising from transport chain operations. Geneva: International Organization for Standardization, 2023.
17. ISO 14064-1:2018. Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. Geneva: ISO, 2018.
18. EFRAG. Voluntary Sustainability Reporting Standard for non-listed Small- and Medium-sized Undertakings (VSME). Brussels, 17 December 2024.
19. OECD. Greening Global Value Chains: Insights from Uzbekistan. Paris: OECD Publishing, 2023.
20. Mukhammadiyaminova Sh. Sh. Economic indicators of supply chain efficiency in Uzbekistan's export sector // Yashil iqtisodiyot va taraqqiyot. 2025. № 11. P. 597–601.



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Ingliz tili muharriri: Feruz HAKIMOV

Musahhih: Zokir ALIBEKOV

Sahifalovchi va dizayner: Hasan MAQSUDOV

2026. № 9/3

© Materiallar ko'chirib bosilganda "Yashil" iqtisodiyot va taraqqiyot" jurnali manba sifatida ko'rsatilishi shart. Jurnalda bosilgan material va reklamalardagi dalillarning aniqligiga mualliflar ma'sul. Tahririyat fikri har vaqt ham mualliflar fikriga mos kelamasligi mumkin. Tahririyatga yuborilgan materiallar qaytarilmaydi.

Mazkur jurnalda maqolalar chop etish uchun quyidagi havolalarga maqola, reklama, hikoya va boshqa ijodiy materiallar yuborishingiz mumkin.
Materiallar va reklamalar pullik asosda chop etiladi.

El.Pochta: sq143235@gmail.com

Bot: @iqtisodiyot_77

Tel.: 93 718 40 07

Jurnalga istalgan payt quyidagi rekvizitlar orqali obuna bo'lishingiz mumkin. Obuna bo'lgach, @iqtisodiyot_77 telegram sahifamizga to'lov haqidagi ma'lumotni skrinshot yoki foto shaklida jo'natishingizni so'raymiz. Shu asosda har oygi jurnal yangi sonini manzilingizga jo'natamiz.

"Yashil" iqtisodiyot va taraqqiyot" jurnali 03.11.2022-yildan O'zbekiston Respublikasi Prezidenti Adminstratsiyasi huzuridagi Axborot va ommaviy kommunikatsiyalar agentligi tomonidan №566955 reyestr raqami tartibi bo'yicha ro'yxatdan o'tkazilgan.

Litsenziya raqami: №046523. PNFL: 30407832680027

Manzilimiz: Toshkent shahar, Mirzo Ulug'bek tumani
Kumushkon ko'chasi, 26-uy.



Jurnal sayti: <https://yashil-iqtisodiyot-taraqqiyot.uz>
