

## **VERIFICATION REPORT**

(ISO 14064-2) CLIMATE

### PROTECTIVE FOREST OF MAKARIV





Project name	PROTECTIVE FOREST OF MAKARIV
Version	01
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Client	ARGE STW e.V. and T3C Ltd
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Report prepared Testing, Inspection and Certification LLC (Former TMS) TÜV AUSTRIA	
Contact	Street: Sichovih Strilciv 50, of. 2b City: Kyiv, Ukraine, 04053 Tel. +380 44 495 7683, +380 44 500 3345 Fax: +380 44 500 3346 : +380 50 419 69 12
Report signed	General Director Mykhailo LEVYTSKY m.levitskij@tic-ua.com

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Client: ARGE STW e.V. and T3C Limited

1 GENERAL INFORMATION:

Project: CLIMATE PROTECTIVE FOREST MAKARIV

Project objective: Implementation of a climate protection project to obtain Verified Emissions Reductions (VER) certificates for the voluntary market for climate protection measures

Criteria: the project has been checked for compliance with the requirements of the international standard ISO 14064:2:2019 Greenhouse gases - Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements Methodology: Methodology for climate protection projects in forests for Ukraine

Terminology: Terminology used ISO 14064:2:2019

Description: The project covers mainly state-owned forests in the Kyiv region in Makarov.

Data on the area was obtained from the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine".

The project covers areas of accessible forest, excluding shrubs, according to the inventory of the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine". The project area in Makariv is 33,667.80 (23,678.3)

Location: The project area is located in Central Ukraine and includes mainly state forests in the Kyiv Hills.

### Input data:

At the beginning of the project, the forest stock in the project area was 282 m³/ha, which is legally required. The model stock level is 280 m³/ha. Reducing the stock is not a viable option from a silvicultural or legal point of view, although it would also be operationally feasible given the appropriate timber market situation.

Project "CLIMATE PROTECTIVE FOREST MAKARIV"

Project area	23'678,3	На
upper model value	368	m³/ha
lower model value	137	m³/ha
Liabilities reserve	280	m³/ha
30 years m3/ha/year	4,46	m³/ha
Softwood		
processing	1,11	tCO <sub>2</sub> /m <sup>3</sup>
Hardwood wood		
processing	1,5	tCO <sub>2</sub> /m <sup>3</sup>
Sequestration	6,212	tCO <sub>2</sub> /Ha/ year
Sequestration	147.094,132	tCO₂/year
Project duration t	30	Years
Complete sequestration	4.412.823,962	tCO <sub>2</sub>

The method was tested and verified by Technical and Management Services LLC (hereinafter referred to as TMS) based on ISO 14064-2.

It uses recognized international methods and sources. No requests for clarification were made during the review and verification.

Client: ARGE STW e.V. and T3C Limited

As a result of the verification, the TMS confirms:

- All precautions were described and implemented according to the methodology
- there are reliable databases for conservative determination of emission absorption efficiency,
- monitoring system implemented and emission absorption efficiency achieved.
- The monitoring plan was prepared in accordance with the methodology
- no double counting occurs.

Testing, Inspection and Certification LLC (Former TMS) TÜV AUSTRIA hereby confirms that the project has achieved the following emission reductions over the specified period.

The project took maximum account of risks and uncertainties, and appropriate measures were taken.

The verification showed that the project meets the requirements of the method and standard ISO 14064-2.

Monitoring period: from 10/14/2022 to 12/31/2051

Within 30 years, a removal capacity of 4,412,823 t CO<sub>2</sub>e (147,094 t CO<sub>2</sub>e per year) can be achieved.

Project area: 23,678.3 hectares

Verified emission absorption efficiency: 147,094 t CO₂e

The scope of validation and verification is understood as a thorough, independent and objective assessment of the project and its implementation. This includes, in particular, the correct application of the methodology, the project baseline study, the justification of additionality, the involvement of stakeholders, the environmental impact and monitoring plan included in the project report, as well as other evidence that ensures that the ISO 14064-2 project activities based on the company's own methodology comply with all relevant and applicable ISO 14064-2 standards. The criteria are met. The project monitoring report and the Excel spreadsheet used to calculate emission reductions will also be reviewed and assessed during the verification process. The information contained in the project and monitoring report, as well as in the supporting documents, has been reviewed and assessed in accordance with the requirements of ISO 14064-2 and the company's own methodology. - Validated method requirements; - Relevant local laws and regulations - ISO 14064-2 requirements; The purpose of validation and verification is to verify the design documentation and its implementation on site by independent third parties (ITPs).

In particular, the following items are validated and verified: Validation and verification are based on information provided by Testing, Inspection and Certification LLC (Former TMS) TÜV AUSTRIA and the contractual terms. Testing, Inspection and Certification LLC (Former TMS) TÜV AUSTRIA shall not be liable to any legal entity for issuing a validation report based on false or misleading information provided to it during validation. Validation and verification are not intended to provide advice to project participants. However, requests for clarification and/or corrective actions may contribute to improving the project design.

Client: ARGE STW e.V. and T3C Limited

2 PROJEKT

2.1 Type and scope of the project, technologies and measures used, and project suitability:

### Description

The project covers mainly state-owned forests in the Kyiv region in Makariv. Data on the area was obtained from the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine". The project covers areas of accessible forest, excluding shrubs, according to the inventory of the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine". The project area in Makariv is 33,667.80 hectares (23,678.3 hectares)

Location: The project area is located in Central Ukraine and includes mainly state forests in the Kyiv Hills.

At the beginning of the project, the forest stock in the project area was 280 m³/ha, which is legally required. The model stock level is 280 m³/ha. Reducing the stock is not a viable option from a silvicultural or legal point of view, although it would also be operationally feasible given the appropriate timber market situation.

upper model value 368 m³ / year lower model value 137 m³ / year Liabilities reserve 280 m³ / year Difference in obligations 143 m³ / year

### Results

⋈ No deviations were detected.

☐ The following deviations were detected:

### Final assessment (if necessary)

The type and scope of the project were determined during the inspection and online interview, which consisted of a comprehensive inspection of the forest and a presentation of the forest management by the operations manager. All phases of forest development and growth zones occurring within the forest management were explained, and the economic basis for joint use activities was discussed to obtain a complete picture of the overall situation in the forest management. The project and its Description meet the applicable criteria of ISO 14064-2.

□ Compliance with applicable criteria ISO 16064-2

CO <sub>2</sub> Project Overview				
	Forest area	Minus	Creditable	Participation
	Total, ha	NWF, ha	Project area, ha	Secured, ha
"Forests of Ukraine" Branch "Makariv Forestry"	33.667,8	9.989,5	23.678,3	23.678,3

### 2.2 Project owner(s)

Desc	Description	
Work	Working group ARGE STW e.V. and T3C Ltd	
Resu	Results	
$\boxtimes$	No deviations were detected.	

Client: ARGE STW e.V. and T3C Limited

☐ The following deviations were detected:

Final assessment (if necessary)

Charter of the State Specialized Economic Enterprise "FORESTS OF UKRAINE" edition of 04.03.2024 (Order No. 53 of 04.03.2025) Makariv Forestry Branch of the State Specialized State Enterprise "Forests of Ukraine"

Agreement on interaction between the State Enterprise "Makariv Forestry" and the STW e.V. Ecological Fund of October 14, 2022

2021 on the assessment of the climate protection project (General Assembly, 19.01.2021) 2022 on the launch of the project at the General Assembly of June 24, 2022 2022 Start of the project-

Start of the project – October 14, 2022

- The project duration is 30 years (project completion date is December 31, 2051)
- There are officially approved operational plans, which means that spatial planning requirements are met. Some of the operations are also FSC certified.
- Monitoring is carried out every 5 years based on usage records (from usage statistics of the State Enterprise "Forests of Ukraine").

Agreement on interaction and cooperation between the Makariv Forestry Branch of the State Specialized Economic Enterprise "Forests of Ukraine" and the STW e.V. Ecological Fund dated March 27, 2025.

### 2.3 Project duration

Desc	Description		
The project runs from 10/14/2022 to 12/31/2051			
Resu	Results		
$\boxtimes$	No deviations were detected.		
	The following deviations were detected:		
Final assessment (if necessary)			

The start of the project is confirmed by a document

Agreement on interaction between the State Enterprise "Makariv Forestry" and the STW e.V. Ecological Fund of October 14, 2022

2021 on the assessment of the climate protection project (General Assembly, 19.01.2021) 2022 on the launch of the project at the General Assembly of June 24, 2022 2022 Start of the project-

Start of the project – October 14, 2022

- The project duration is 30 years (project completion date is December 31, 2051)
- There are officially approved operational plans, which means that spatial planning requirements are met. Some of the operations are also FSC certified.
- Monitoring is carried out every 5 years based on usage records (from usage statistics of the State Enterprise "Forests of Ukraine").

Agreement on interaction and cooperation between the Makariv Forestry Branch of the State Specialized Economic Enterprise "Forests of Ukraine" and the STW e.V. Ecological Fund dated March 27, 2025.

Client: ARGE STW e.V. and T3C Limited

2.4 Project scope and expected greenhouse gas emission reductions (or emission removals)

### Description

Within 30 years, a removal capacity of 4,412,823 t  $CO_2e$  (147,094 t  $CO_2e$  per year) can be achieved. Project area: 23,678.3 ha Verified removal efficiency: 147,094 t  $CO_2e$ 

### Results

The following deviations were detected:

### Final assessment (if necessary)

The project covers mainly state-owned forests in the Kyiv region in Makariv. Area data was obtained from the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine".

The project covers areas of accessible forest, excluding shrubs, according to the inventory of the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine". The project area in Makariv is 33,667.80 (23,678.3) hectares.

2.5 Project activities

### Description

Forest owners control the development of biomass stocks in the forest by varying the intensity of wood use relative to the increment. By partially refraining from use in managed forests, stocks and therefore carbon storage are increased or protected. In the special case of forest reserves (and islands of old-growth forests), forest owners completely refrain from wood use.

Forest owners commit to maintaining a stock above the "normal" timber stock throughout the project life cycle by accumulating stocks and/or ensuring that the stock does not fall below a certain level.

### Results

The following deviations were detected:

### Final assessment (if necessary)

The forest owner is obliged not to lower the stock below 280 m $^3$ /ha. The difference between the potential stock and the lower model value of 137 m $^3$ /ha is included and amounts to 143 m $^3$ /ha. The technology consists of biological CO $_2$  sequestration in forests. The aim is to increase and/or secure carbon stocks in existing forests. The products will be tradable Verified Emission Reductions (VERs). The expected volume of VERs is 147,094 tCO $_2$ e per year, or a total of 4,412,823 tCO $_2$ e over 30 years

Compliance with applicable criteria ISO 16064-2

### 2.6 Project location

### Description

The project area is located in Central Ukraine and covers mainly state-owned forests in the Kyiv region in Makarov.

Data on the area was obtained from the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine".

Client: ARGE STW e.V. and T3C Limited

The project covers areas of accessible forest, excluding shrubs, according to the inventory of the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine". The project area in Makariv is 33,667.80 (23,678.3) hectares.

Forest owners control the development of biomass stocks in the forest by varying the intensity of wood use relative to the increment. By partially refraining from use in managed forests, stocks and therefore carbon storage are increased or protected. In the special case of forest reserves (and islands of old-growth forests) forest owners completely refrain from wood use.

Forest owners commit to maintaining a stock above the "normal" timber stock throughout the project life cycle by accumulating stocks and/or ensuring that the stock does not fall below a certain level

### Results

☐ The following deviations were detected:

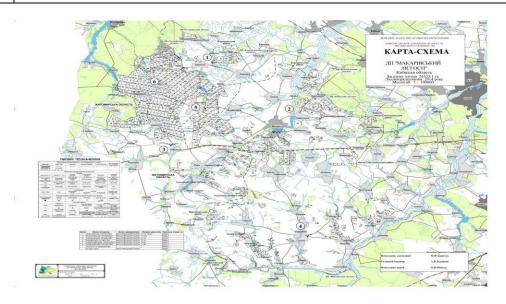
### Final assessment (if necessary)

The forest owner is obliged not to lower the reserve below 280  $\,\mathrm{m}^3/\mathrm{ha}$ . The difference between the potential reserve and the lower model value of 137  $\,\mathrm{m}^3/\mathrm{ha}$  is included and is 143  $\,\mathrm{m}^3/\mathrm{ha}$ .

The project area is 33,667.80 (23,678.3) hectares

The inventory covers 33,667.80 (23,678.3) hectares

Вказане місце розташування можна перевірити



### 2.7 Compliance with applicable laws, statutes and other regulations

### Description

The forest is managed in accordance with legal requirements. The owner of the forest included in the project is legally obliged to maintain a minimum stock of 280 m³/ha. Additional climate protection indicator from the model value 143 m³/ha, taking into account

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the distribution of tree species, is expected to be 147,094 tCO2e per year, or a total of 4,412,823 tCO2e over 30 years

All uses are subject to approval by the Development Partnership of Ukraine (DP) "Forests". This ensures compliance with all legal requirements. The forest is also FSC certified, FC-FM/COC-804927.

Results

No deviations were detected.

The following deviations were detected:

Final assessment (if necessary)

The current stock of wood per hectare of 282 m3/ha is equivalent to a stock commitment of 280 m³/ha. The risks of biomass loss that would reduce the stock below the commitment level are assessed as low. Furthermore, as the project does not account for soil carbon, a carbon buffer at least as large as that contained in the biomass of living trees is provided.

### 2.8 Forest property

### 2.8.1 Confirmation of forest ownership

Descri	Description		
The cl	The claimed ownership of the forest was confirmed during the audit		
Result	ts		
$\boxtimes$	No deviations were detected.		
	The following deviations were detected:		
Final a	assessment (if necessary)		
list of ECONO On ap special On ap Econo On ap "FORE Charte Order Letter 12/18, Charte Charte	Supporting documents are located at the link: https://e-forest.gov.ua/dokumenty/ A short list of documents is as follows: On approval of the Charter of the STATE SPECIALIZED ECONOMIC ENTERPRISE "FORESTS OF UKRAINE" as amended on 04.03.2024 On approval of the Regulation on the principles of forming the supervisory board of the state specialized economic enterprise "Forests of Ukraine" dated 08.05.2024 On approval of the Regulations on the Supervisory Board of the State Specialized Economic Enterprise "Forests of Ukraine" dated 10.05.2024 On approval of the Charter of the STATE SPECIALIZED ECONOMIC ENTERPRISE "FORESTS OF UKRAINE" in the new edition dated 05/13/2024 Charter of the State Specialized Economic Enterprise "Forests of Ukraine" dated 28.05.2024 Order on approval of the charter of the state specialized economic enterprise dated 28.05.2024 Letter of expectations of the owner of the State Enterprise "Forests of Ukraine" for 2025 dated 12/18/2024 Charter of the State Specialized Economic Enterprise "Forests of Ukraine" (new edition) dated 06.02.2025		
$\boxtimes$	Ownership of forest plots must be proven		

Client: ARGE STW e.V. and T3C Limited

### 2.8.2 Emissions trading system

Desc	Description		
Curr	Currently, Ukraine does not have a functioning greenhouse gas emissions		
tradi	trading system.		
Resu	Results		
$\boxtimes$	No deviations were detected.		
	The following deviations were detected:		
Final assessment (if necessary)			
n/a	n/a		

### 2.8.3 Leakage management

### Description

Leakage is a negative externality. This means that underuse of forest land in one place cannot be compensated for by increased use in another. Internal leakage affects the forest owner himself. External leakage, commonly called market leakage, can also occur geographically further away.

Internal leakage: Leakage in the narrow sense is avoided by requiring the forest owner to include all of his forest in the project. The exclusion of areas should be justified and should be conservative in terms of carbon footprint. For example, areas with low production, not included in the timber inventory, areas awaiting sale

External leakage: In principle, it cannot be ruled out that more timber will be cut down elsewhere due to the project's timber absorption. However, the timber market is highly interconnected, both globally and nationally.

# Results ☑ No deviations were detected. ☐ The following deviations were detected: Final assessment (if necessary)

Internal leakages are excluded, as the project activities concern the entire forest area.

The current utilization rate in Ukraine is approximately 4.1 m3/ha/year. The sustainable utilization rate ranges from 7.1 to 8.6, with an average of 7.9 m3/ha/year. The project results in an underutilization of the sustainable utilization potential at the project level. As long as the overall utilization rate in Ukraine remains below the sustainable potential, no leakages can be attributed to the individual project. Only when this utilization rate is exceeded does a possible causal link arise.

$\boxtimes$	Compliance with applicable criteria ISO 16064-2

2.9 Application of the method

### 2.9.1 Titles and links

Description			
	Methodology applied: Methodology for climate protection projects in forests for Ukraine (Version 1.2)		
Resu	Results		
$\boxtimes$	No deviations were detected.		
	The following deviations were detected:		
Final assessment (if necessary)			
The application of this methodology was verified during the audit, and its name is confirmed.			
$\boxtimes$	Compliance with applicable criteria ISO 16064-2		

### 2.9.2 Applicability

<u> </u>			
Descripti	Description		
The main prerequisite for applying the method is confirmation of the applicant's			
ownersh	ip of the forest plots included in the calculation.		
Results			
$\boxtimes$	No deviations were detected.		
	The following deviations were detected:		
Final asso	essment (if necessary)		
Supporti	ng documents are located at the link: https://e-		
forest.go	v.ua/dokumenty/		
A short li	ist of documents is as follows:		
On appro	oval of the Charter of the STATE SPECIALIZED ECONOMIC ENTERPRISE		
"FORESTS OF UKRAINE" as amended on 04.03.2024			
On approval of the Regulations on the principles of forming the supervisory board of the state specialized economic enterprise "Forests of Ukraine" dated 08.05.2024			
On approval of the Regulations on the supervisory board of the state specialized economic enterprise "Forests of Ukraine" dated 10.05.2024			
On approval of the Charter of the STATE SPECIALIZED ECONOMIC ENTERPRISE "FORESTS OF UKRAINE" in the new edition dated 13.05.2024			
Charter of the State Specialized Economic Enterprise "Forests of Ukraine" dated 28.05.2024			
Order on approval of the charter of the State Specialized Economic Enterprise dated 28.05.2024			
List of expectations of the owner of the State Enterprise "Forests of Ukraine" for 2025 dated			
18.12.2024			

Client: ARGE STW e.V. and T3C Limited

Charter of the State Specialized Economic Enterprise "Forests of Ukraine" (new edition)
dated 06.02.2025

Compliance with applicable criteria ISO 16064-2

2.9.3 Project boundaries

# Description The project area is located in Central Ukraine and covers mainly state-owned forests in the Kyiv region in Makariv.

Area data was obtained from the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine".

The project covers areas of accessible forest, excluding shrubs, according to the inventory of the Makariv Forestry Branch of the State Enterprise "Forests of Ukraine".

The project area in Makariv is 33,667.80 (23,678.3) hectares.

Results	
X	No deviations were detected.
	The following deviations were detected:
Final assessment (if necessary)	
The area and area of the continuous and area of the continuous CDC decision and area of Continuous and	

The project location was determined using a GPS device and maps. Existing maps and planning frameworks clearly indicate the location of productive forest areas

### 2.9.4 Baseline scenario

### Description The baseline scenario is based on average increments determined by forest inventory, utilization data, sustainable use factors obtained from yield tables, and tree species composition. Increments were determined based on subsequent inventories conducted by the branch of the State Enterprise "Lisa Ukraina" in Makariv Forestry. The average increment is 4.75 m<sup>3</sup>/ha/year Results No deviations were detected. |X|The following deviations were detected: Final assessment (if necessary) Growth with felling % m<sup>3</sup>/ha 68,50% 5,12 pine 11,40% oak 3,09 0,50% 4,9 ash acacia 0,40% 3,9

Client: ARGE STW e.V. and T3C Limited

birch	8,90%	3,7
aspen	1,50%	5,9
alder	7,80%	5,1
Other	1,00%	5,5
Growth		4,75

The increase was obtained based on information from the inventory report covering the entire forest of the Makariv region for the project area.

### 2.9.5 Additionality of the project

Description	
The additionality of the project is based on the voluntary commitment of participants to enrich their reserves.	
Results	
$\boxtimes$	No deviations were detected.
	The following deviations were detected:
Final assessment (if necessary)	
no	
$\boxtimes$	Compliance with applicable criteria ISO 16064-2

2.9.6 Quantifying greenhouse gas emission reductions and removals.

### 2.9.6.1 Quantification of baseline emissions

Description	
The calculation specified in the methodology is based on the formulas of the AR CDM	
methodology AR- AMS0001, IPCC 2006, GL for AFOLU	
Equation 1 is used to calculate the reference scenario. The reference emissions result from the difference between the carbon stocks in the initial stock at the start of the project and the assumed target stock in the reference scenario (see Section 2.9.4).	
The calculation is similar to equation 10.	
To convert wood reserves into biomass of living trees, appropriate conversion factors are used (carbon content, conversion factors of reserves (volume of wood of the trunk of living trees) into biomass).	
Results	
No deviations were detected.	
The following deviations were detected:	
Final assessment (if necessary)	

Client: ARGE STW e.V. and T3C Limited

The Excel calculations provided by the project owner have been reconstructed This means that the calculation steps required to estimate the reference emissions have been reconstructed step by step and checked for accuracy

X

Compliance with applicable criteria ISO 16064-2

### 2.9.6.2 Quantification of emissions from the project

### Description

Project emissions: Project emissions are greenhouse gas emissions resulting from the project, such as forest ranger inspection trips and biodiversity conservation activities. These types of emissions are lower than or at most equal to emissions from normal management (road construction, logging and skidding equipment, forest ranger planning and monitoring trips, and freight transport).

Potential emission reductions from management are not included in the project emission reductions. Project emissions, which are usually smaller, are considered zero in this methodology.

### Results

The following deviations were detected:

Final assessment (if necessary)

Project emissions are calculated as zero

### 2.9.6.3 Quantification of leaks

### Description

Leakage is considered zero.

Leakage is a negative externality. This means that underuse of forest land in one place cannot be compensated for by increased use in another. Internal leakage affects the forest owner himself. External leakage, commonly referred to as market leakage, can also occur geographically further away.

Internal leakage: Leakage in the narrow sense is avoided by requiring the forest owner to include all of his forest in the project. Exclusion of areas should be justified and conservative in terms of carbon footprint. For example, areas with marginal productivity, not included in the timber inventory, areas awaiting sale.

### Makariv Climatic Forest

The entire forest area has been declared.

External leakage: In principle, it cannot be excluded that more wood will be cut elsewhere due to the takeover project. However, the wood market is highly interconnected, both globally and nationally. Current use in Ukraine is approximately 4.1 m³/ha/year.

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The sustainable use rate ranges from 7.1 to 8.6, with an average of 7.9 m³/ha/year (ref. 30). The project leads to an underutilization of the sustainable use potential at the project level. As long as the overall use rate in Ukraine remains below the sustainable potential, no leakage can be attributed to the individual project. Only when this utilization rate is exceeded does a possible causal link arise.

Results

No deviations were detected.

The following deviations were detected:

Final assessment (if necessary)

The leakage is considered zero.

Compliance with applicable criteria ISO 16064-2

### 2.9.6.4 Summary of GHG emission reductions

### Description

The method is based on the formulas of the AR CDM method AR-AMS0001.

The CDM methodology formulas are used as follows:

- Reference scenario (baseline): equation 1
- Basic absorber: equation 10
- Conversion factors (BEF) are used to convert wood stock into living tree biomass.
   Equations 2-9, 15 and 16 are therefore not applicable. National biomass expansion factors (BEF) take into account the total biomass of trees, not just the above-ground biomass. The root-to-shoot ratio variable is therefore not applicable.
- For preliminary calculation of the absorber power, equations 11-14, 17 and 18 are used
- The leakage is assumed to be zero, so equation 19 is applied. The conditions for this given in section 3.4 c) must be met.
- The total net absorption power is calculated using equation 21.
- Certificates will not be time-limited, equations 22 and 23 will not apply.
- For ex-post calculations, equations 24, 29, 35 and 36 are used. The remaining equations are irrelevant due to the use of conversion factors.

Results		
$\boxtimes$	No deviations were detected.	
	The following deviations were detected:	
Final assessment (if necessary)		
The current stock of wood per hectare of 282 m3/ha is equivalent to a stock commitment of		
280 r	280 m <sup>2</sup> /h <sup>2</sup> . The risks of highest loss that would reduce the stock below the commitment level	

280 m3/ha. The risks of biomass loss that would reduce the stock below the commitment level are assessed as low. Furthermore, as the project does not account for soil carbon, a carbon buffer at least as large as that contained in the biomass of living trees is provided.

Client: ARGE STW e.V. and T3C Limited

The additional climate protection from the model value of 143 m $^3$ /ha, taking into account the distribution of tree species, is expected to be 147,094 tCO2e per year, or a total of 4,412,823 tCO $_2$ e over 30 years.

☐ Compliance with applicable criteria ISO 16064-2

### 2.9.6.5 Statistical uncertainties in emission calculations

### Description Inventory data (stock, growth, mortality) are based on sample inventories, conducted by the branch of the State Enterprise " Forests of Ukraine" in Makariv Forestry in farms (sample inventory with concentric circles of sampling). The standard error of the stock cannot be determined precisely. For a representative area, a sample of 2 hectares yields over 3500 samples. Thus, the total error (standard error) is likely to be less than 2%. The usage data comes from the usage control of the State Enterprise " Forests of Ukraine", branch "Makariv Forest" and is recorded while standing. Therefore, a reverse calculation based on logging measurements (lying measurements, factory measurements) is not required. Results No deviations were detected. X The following deviations were detected: Final assessment (if necessary) All data used were obtained from the branch of the State Enterprise "Forest of Ukraine" in Makariv Forestry. Therefore, they meet regulatory requirements Compliance with applicable criteria ISO 16064-2

### 2.9.7 Method deviation

Description	
No deviations from the methodology were identified.	
Results	
$\boxtimes$	No deviations were detected.
	The following deviations were detected:
Final assessment (if necessary)	
No	
$\boxtimes$	No deviations were detected.
X	No deviations were detected.

### 2.9.8 Monitoring plan

### 2.9.8.1 Data and parameters available at the time of validation

Description		
Makariv Climate Protection Forest.		
Project area: 33,667.80 (23,678.3) hectares, table from Makariv Forest based on DP Forest of		
Ukraine data,		
Carbon storage: see section 3.2, the relevant storage is the biomass of living trees. Wood stock		
at the start of the project: data collected from various inventories leads to a stock at the end		
of 2022 of 281,9 m³/ha		
Back-calculation taking into account growth, mortality, and use, for the		
beginning of 2022 resulted in 282 m³/ha		
Increment: Calculated based on subsequent inventories: 4.75 m³/ha/year Use: From the		
"State Enterprise Forest of Ukraine", Department of Control over the Use of Makariv Forest		
Results		
☐ The following deviations were detected:		
Final assessment (if necessary)		
No		

### 2.9.8.2 Data and parameters to be monitored

Description		
Project area		
Harvest volume in reserve cubic meters		
Officially approved operational plan/regional plan		
FSC® Certification Confirmation (if applicable) Certification Group: FC- FM/COC-804927,		
License Code: FSC-A00510		
Public consultation on the project (if applicable)		
New stocks (if applicable) SE "Forests of Ukraine" conducts successive inventories through	out	
the region. Inventories of enterprises were conducted in different years, and this practice	will	
continue. More recent inventory data is not available.		
Usage volume - 6,635,300 in 2021 as a Proxy for 2022		
Leakage control parameters (potential usage minus project absorption capacity)		
Reference value of root and initial wood stock – 280 m <sup>3</sup> /ha		
Results		
No deviations were detected.		
The following deviations were detected:		
Final assessment (if necessary)		
No		
No deviations were detected.		

Client: ARGE STW e.V. and T3C Limited

### 2.9.8.3 Applicability and suitability of the monitoring procedure

Desc	ription
Project Area	
Gene	erally accepted appropriate survey methods are used for monitoring
Results	
$\boxtimes$	No deviations were detected.
	The following deviations were detected:
Final assessment (if necessary)	
No	
$\boxtimes$	No deviations were detected.

### 2.9.8.4 Monitoring responsibilities

Description		
Implementation and Monitoring Manager:		
Olexi	Olexiy Sydorenko, T3C Limited	
Project Developer		
Olexiy Sydorenko, T3C Limited		
Results		
$\boxtimes$	No deviations were detected.	
	The following deviations were detected:	
Final assessment (if necessary)		
No		
$\boxtimes$	No deviations were detected.	

### 2.10 Environmental and social criteria

### Description

Companies with a formally approved operational plan do not need an Environmental Impact Assessment (EIA) for the CO2 capture project. The formally approved operational plan covers spatial planning requirements. Certifications according to a recognized procedure such as FSC or equivalent can also be used as evidence of environmental and social compatibility. If none of these documents are available, compliance with spatial planning requirements must be demonstrated (e.g. forest management plan)

In principle, it can be assumed that forest water abstraction projects within the framework of officially approved operational plans comply with legal requirements regarding environmental issues. Certification according to a voluntary forest management standard can be cited as additional evidence of the environmental and social compatibility of the abstraction project.

	uch a basis does not exist, it is necessary to conduct public consultations on the project insultations with stakeholders from the environmental, economic and social sectors).
Resul	lts
$\boxtimes$	No deviations were detected.
	The following deviations were detected:
Final assessment (if necessary)	
All uses are subject to approval by the Development Partnership of Ukraine (DP) "SE Forest	
Ukraine".	
The participating logging companies have officially approved operational plans and their use is	
officially approved. The company is FSC certified (Artus Group certificate FC-FM/COC-804927,	
license code: FSC-A00510).	
$\boxtimes$	No deviations were detected.

### 2.11 Stakeholder comments

Description	
If there are forest management plans or similar inter-company plans subject to participation and approved business plans within which the project is implemented special consultations and communications are required. The same applies to certification or equivalent certificates. If there is no such basis, public consultations of project (consultations with stakeholders from the environmental, economic and sectors) are required.	ed, no FSC on the
Possible public consultations on the project (consultations with stakeholders from the environmental, economic and social sectors).	e
Results	
No deviations were detected.	
The following deviations were detected:	
Final assessment (if necessary)	
Officially approved operational plans are in place, meeting the spatial planning requir for public consultations. Wood labeling is controlled by the company "DP Forests of U	
In addition, the company is FSC certified. The participating logging companies have approved operational plans, and their use is officially approved. The company is FSC of the	•
(Artus Group certificate FC- FM/COC-804927, license code: FSC-A00510).	
□ No deviations were detected	

Client: ARGE STW e.V. and T3C Limited

### 3 INSPECTION OPINION AND INSPECTION DECLARATION

Working group ARGE STW e.V. and T3C Limited instructed the company Testing, Inspection and Certification LLC (Former TMS) TÜV AUSTRIA to validate the project "Climate Protection Forest Makariv" in the central part of Ukraine in accordance with the requirements of the ISO 14064-2 standard.

The project includes a voluntary cessation of timber harvesting.

No clarification requests were submitted within the framework of the joint validation and verification process to be considered during the second periodic verification.

The review of the project documentation and additional documents related to the baseline scenario and monitoring methodology, as well as further investigation, provided the Testing, Inspection and Certification LLC (Former TMS) TÜV AUSTRIA with sufficient evidence to verify compliance with the specified criteria

The detailed conclusions can be summarized as follows:

- The appropriate level of assurance was applied.
- All data and information used to calculate projected emission reductions are predictive and/or hypothetical in nature.
- The project complies with all relevant legislation of the country hosting the project.
- The monitoring plan is transparent and appropriate.
- The calculation of the project's emission reductions is carried out in a transparent and conservative manner, resulting in an estimated emission reduction of 147,094 t CO<sub>2</sub>e annually.

The findings of this report show that the project, as described in the Greenhouse Gas Removal Report (GHG-R), meets all criteria applicable for validation according to ISO 14064-2 without any limitations.

As a result of the initial periodic review, TMS confirms that the greenhouse gas emission reductions have been calculated conservatively and appropriately without any material errors. TMS hereby confirms that the project has achieved the following emission reductions during the above reporting period:

Period	Estimated emissions associated with the project, tCO <sub>2</sub> e	Project- related emissions, tCO <sub>2</sub> e	Project-related emissions, tCO <sub>2</sub> e	Net removals, tCO₂e
14.10.2022 -	147 094	0	0	147 094
14.10.2023 Net removals, tCO <sub>2</sub> e				147 094

Signed by Testing, Inspection and Certification LLC (Former TMS) TÜV AUSTRIA Partner

**General Director** 



Mykhailo LEVYTSKY