EUROPEAN
COMMISSION

Brussels, 19.7.2023
C(2023) 4792 final

ANNEX

ANNEX

to the

Commission Decision

on financing the implementation of the preparatory action on "Developing a methodology and sustainability standards for mitigating the environmental impact of crypto-assets" and adopting the work programme for 2023

ANNEX

Work programme for 2023 on financing the implementation of the preparatory action on "Developing a methodology and sustainability standards for mitigating the environmental impact of crypto-assets"

1. Introduction

On the basis of the objectives given in the budget remarks, this work programme contains the actions to be financed and the budget breakdown for the year 2023 as follows:

(c) for procurement (implemented under direct management[1]) (point 4).

[1] Including delegation to executive agencies.

Legal basis

Definitive adoption (EU, Euratom) 2023/278 of the European Union's budget for the financial year 2023 includes Preparatory Action PA 03 23 01 on "Developing a methodology and sustainable standards for mitigating the environmental impact of crypto-assets" and Article 58(2)(b) of Regulation (EU, Euratom) 2018/1046, which provides that appropriations may be implemented without a basic act for preparatory actions in the field of application of the TFEU and the Euratom Treaty, designed to prepare proposals with a view to the adoption of future actions.

Budget line(s)

PA 03 23 01

Objectives pursued

The objective pursued under this preparatory action implemented by the European Commission will be to :

a) develop a robust scientific-based methodology, including qualitative criteria and quantitative indicators, to measure the climate and environmental impact of the consensus mechanism protocols used by crypto-assets, the total amount of carbon emissions produced, the consumption of energy and resources, and the electronic waste produced by the entire network of a particular crypto-asset and by the crypto-asset ecosystem of that crypto-asset as a whole, on a global level;

b) conduct a comprehensive mapping of the various types of consensus mechanisms used by crypto-assets and their classification in relation to their climate and environmental impact, including an analysis of potential trade-offs;

c) assess the broader impact on ESG factors, in particular the relevant environmental, economic and social externalities generated by crypto-mining, including impact on high-demand chip supply, noise pollution, electricity consumption and water, as well as the impact and financial risks posed on European public power utilities;

d) identify sustainable alternative to crypto-mining in the market and best practices for the development and adaptation of consensus mechanism protocols that are less energy intensive and do not cause any significant harm to the Union climate and environmental objectives and energy targets;

e) outline different policy options to mitigate the environmental impact of crypto-assets and to accelerate the adoption of alternative green solutions;

f) assess the feasibility of developing sustainability standards for crypto-assets.

Expected results

The development of a potential methodology and possible sustainability indicators and standards, with special emphasis on various factors concerning the entire network of a crypto-asset, in particular the energy consumption, the use of natural resources, the carbon footprint, any electronic waste produced by the use of hardware, the incentive structure and design of the protocol, the market capitalisation and scale of operation of the crypto-assets concerned.

Climate and biodiversity mainstreaming contribution - description of how the action(s) included in this work programme contribute to climate and biodiversity mainstreaming, in qualitative and quantitative ways.

The results of the preparatory action will contribute to climate mainstreaming by pointing to potential ways in which the carbon footprint and energy consumption of crypto-assets could be reduced as well as ways in which electronic waste from the mining and use of crypto-assets could be reduced. As secondary effects, through the reduction of the carbon footprint of crypto-assets and the reduction of electronic waste (and hence contamination of soil, air and water) the preparatory action could contribute to biodiversity mainstreaming.

2. Grants

Not applicable

3. Prizes

Not applicable

4. Procurement

The global budgetary envelope reserved for procurement contracts in 2023 is EUR 800 000.

4.1 Mitigating the environmental impact of crypto assets

General descripton of the contracts envisaged

One or more service contracts would be awarded following procurement procedures and/or through the use of one or more existing framework contracts to develop a potential methodology .

Implementation

The action will be implemented directly by DG FISMA.

5. Actions implemented in indirect management

Not applicable

6. Trust funds

Not applicable

7. Financial instruments implemented in direct or indirect management

Not applicable

8. Contribution to blending facilities

Not applicable

9. Other actions or expenditure

Not applicable