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| 2) From: scalable, or even energy (Clean, affordable, and secure energy) | 2.1. Demonstration of innovative critical technologies to enable future large scale deployment of offshore renewable energy (with the possibility to address also hydrogen applications) | The development of land-based renewable energy technologies and their integration into the energy system | • Develop innovative solutions for either direct heating and/or power generation, e.g. by using renewable energy sources | Demonstration of critical offshore renewable energy innovations at sea considering the efficiency, reliability and sustainability that is different from onshore renewable energy systems notably large scale integrated systems, floating and submersible, mooring and anchoring systems specifically conceived for floating offshore systems, the varied seabed conditions for floating offshore systems. | Subfigure 1: Development of land-based renewable energy technologies and their integration into the energy system | 68 | 3-6 | Hydrogen Project (H) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) | Proposals shall address at least the offshore renewable power generating systems and the related energy system integration requirements, and may address grid infrastructure and/or power to hydrogen systems. Multi-functional platforms can be considered. |
| | 2.2. Develop and demonstrate a 100 MW electrolyser per operating the link between renewables and industrial applications | • Develop larger modules than the state of the art, with a reduced balance of plant, optimal hydrogen and oxygen streams, as well as the heat flow, while ensuring the reliability of the system and reducing the footprint through a more compact design. | • Develop and deploy highly innovative and recyclable catalytic material systems | 2. Assemble the modules into a 100MW electrolyser system operating flexibly, to be able to produce renewable power and provide grid-balancing services, and supplying renewable hydrogen to a commercial/industrial application | Subfigure 2 (Innovation Action): Demonstration of innovative technologies to enable future large scale deployment of offshore renewable energy | 69 | 20-35 | Hydrogen Project (H) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) | Proposals shall address the following: • Demonstration of innovative technologies, installation methods, transport, operation and maintenance of the related energy infrastructure. • Marine spatial planning issues (finding multiple use of the seas possible, but also considering emerging environmental impacts) as well as currently known barriers such as costs, public acceptance and vulnerability to changing climate conditions in offshore areas. Technology T16.7.5 (seawater electrolysis) technology. |
| | 2.3. From: up to 100 MW electrolyser per operating the link between renewables and industrial applications | • Develop and demonstrate a 100 MW electrolyser per operating the link between renewables and industrial applications | • Develop and deploy highly innovative catalytic materials and renewable energy driven technologies for the production of synthetic fuels, polymers and chemicals from industrial waste gas emissions (CO2 and CO streams) | 3. Address the performance and the durability of the electrolyser operating dynamically | | 70 | 20-35 | Hydrogen Project (H) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) | • Projects are requested to demonstrate the technology at sea while respecting existing • Present an environmental monitoring plan to be implemented during the demonstration activities |
| 3) From: up to 100 MW electrolyser per operating the link between renewables and industrial applications | 3.1. Closing the carbon cycle in industry, renewable energy driven reduction of CO2 using innovative materials and technologies | • Develop and demonstrate a 100 MW electrolyser per operating the link between renewables and industrial applications | • Develop and deploy highly innovative catalytic materials and renewable energy driven technologies for the production of synthetic fuels, polymers and chemicals from industrial waste gas emissions (CO2 and CO streams) | 4. Assess the performance and the durability of the electrolyser operating dynamically | | 71 | 20-35 | Hydrogen Project (H) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) | • Projects are requested to demonstrate the technology at sea while respecting existing • Present an environmental monitoring plan to be implemented during the demonstration activities |
| | 3.2. Demonstration of systems solution for the territorial deployment of the circular economy | • Develop and demonstrate a 100 MW electrolyser per operating the link between renewables and industrial applications | • Develop and deploy highly innovative catalytic materials and renewable energy driven technologies for the production of synthetic fuels, polymers and chemicals from industrial waste gas emissions (CO2 and CO streams) | 5. Address potential safety issues | | 72 | 20-35 | Hydrogen Project (H) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) | • Projects are requested to demonstrate the technology at sea while respecting existing • Present an environmental monitoring plan to be implemented during the demonstration activities |
| | 3.3. From: up to 100 MW electrolyser per operating the link between renewables and industrial applications | • Develop and demonstrate a 100 MW electrolyser per operating the link between renewables and industrial applications | • Develop and deploy highly innovative catalytic materials and renewable energy driven technologies for the production of synthetic fuels, polymers and chemicals from industrial waste gas emissions (CO2 and CO streams) | 6. Address potential safety issues | | 73 | 20-35 | Hydrogen Project (H) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) (Hydrogen Action) | • Projects are requested to demonstrate the technology at sea while respecting existing • Present an environmental monitoring plan to be implemented during the demonstration activities |

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| 9. Əməkdaşlıqda Avropa Birliyi və digər ölkələrlə birgə tədqiqatlar aparılaraq, iqlim dəyişikliyi ilə bağlı tədqiqatların koordinasiya edilməsi üçün birgə platforma yaradılmalıdır. | 9. 3. Avropada və Əməkdaşlıqda, iqlim dəyişikliyi ilə bağlı tədqiqatların koordinasiya edilməsi üçün birgə platforma yaradılmalıdır. | This topic supports the development of an EU integrated digital ocean building on existing Copernicus, EMODNET, ERIC assets, addressing concrete cases in local or regional sea basins, and demonstrating their potential to support the development of the Green Deal priorities. | <ul style="list-style-type: none"> • The development of a ocean digital twin needs to build all of the following capacity: <ul style="list-style-type: none"> • deliver break through in accuracy and reliability, represent optimal specificity through observation and models; • fully integrate downstream impact sectors of the socio-economic system affected in their test case; • establish a rigorous standard of quality and confidence level with digital technologies (cloud, super computing, AI and data analytics) into a consistent high-resolution and high frequency data stream; and • ensure a high level of interoperability and data sharing across the full range of the ocean. | Proposed activities: <ul style="list-style-type: none"> • Digital interactive replicas of the oceans and seas • Develop the integration of existing EU research, edge capacities in ocean observation, forecasting and data warehouses • Concrete cases in local or regional sea basins, demonstrating the use of digital twins with regard to several of the Green Deal priorities, integrated into national infrastructures • Concrete cases, indicative of the potential development of mitigation, adaptation and resilient plans to deal with climate risks, operationality of emergency responses to severe events, sustainable fishing, aquaculture, transport, offshore energy, ... • Develop a strong, transparent monitoring system, solid data, what it requires • Cover the whole knowledge value chain: sensors, modelling, big data and AI applications, user-based services | 25 | 12 | Blue Horizon Project (AI) project: 520 (EU Finance Instrument) fundable for 55100 | |
| 10. Vətəndaşların iştirakı ilə iqlim dəyişikliyi ilə bağlı tədqiqatların koordinasiya edilməsi üçün birgə platforma yaradılmalıdır. | 10. 1. Avropada və Əməkdaşlıqda, iqlim dəyişikliyi ilə bağlı tədqiqatların koordinasiya edilməsi üçün birgə platforma yaradılmalıdır. | This topic supports the development of an EU integrated digital ocean building on existing Copernicus, EMODNET, ERIC assets, addressing concrete cases in local or regional sea basins, and demonstrating their potential to support the development of the Green Deal priorities. | <ul style="list-style-type: none"> • The development of a ocean digital twin needs to build all of the following capacity: <ul style="list-style-type: none"> • deliver break through in accuracy and reliability, represent optimal specificity through observation and models; • fully integrate downstream impact sectors of the socio-economic system affected in their test case; • establish a rigorous standard of quality and confidence level with digital technologies (cloud, super computing, AI and data analytics) into a consistent high-resolution and high frequency data stream; and • ensure a high level of interoperability and data sharing across the full range of the ocean. | Proposed activities: <ul style="list-style-type: none"> • Digital interactive replicas of the oceans and seas • Develop the integration of existing EU research, edge capacities in ocean observation, forecasting and data warehouses • Concrete cases in local or regional sea basins, demonstrating the use of digital twins with regard to several of the Green Deal priorities, integrated into national infrastructures • Concrete cases, indicative of the potential development of mitigation, adaptation and resilient plans to deal with climate risks, operationality of emergency responses to severe events, sustainable fishing, aquaculture, transport, offshore energy, ... • Develop a strong, transparent monitoring system, solid data, what it requires • Cover the whole knowledge value chain: sensors, modelling, big data and AI applications, user-based services | 10 | 3.5 | Blue Horizon Project (AI) Research and Innovation Action) project: 2100 | |
| 10. Vətəndaşların iştirakı ilə iqlim dəyişikliyi ilə bağlı tədqiqatların koordinasiya edilməsi üçün birgə platforma yaradılmalıdır. | 10. 2. Vətəndaşların iştirakı ilə iqlim dəyişikliyi ilə bağlı tədqiqatların koordinasiya edilməsi üçün birgə platforma yaradılmalıdır. | This topic supports the development of an EU integrated digital ocean building on existing Copernicus, EMODNET, ERIC assets, addressing concrete cases in local or regional sea basins, and demonstrating their potential to support the development of the Green Deal priorities. | <ul style="list-style-type: none"> • The development of a ocean digital twin needs to build all of the following capacity: <ul style="list-style-type: none"> • deliver break through in accuracy and reliability, represent optimal specificity through observation and models; • fully integrate downstream impact sectors of the socio-economic system affected in their test case; • establish a rigorous standard of quality and confidence level with digital technologies (cloud, super computing, AI and data analytics) into a consistent high-resolution and high frequency data stream; and • ensure a high level of interoperability and data sharing across the full range of the ocean. | Proposed activities: <ul style="list-style-type: none"> • Digital interactive replicas of the oceans and seas • Develop the integration of existing EU research, edge capacities in ocean observation, forecasting and data warehouses • Concrete cases in local or regional sea basins, demonstrating the use of digital twins with regard to several of the Green Deal priorities, integrated into national infrastructures • Concrete cases, indicative of the potential development of mitigation, adaptation and resilient plans to deal with climate risks, operationality of emergency responses to severe events, sustainable fishing, aquaculture, transport, offshore energy, ... • Develop a strong, transparent monitoring system, solid data, what it requires • Cover the whole knowledge value chain: sensors, modelling, big data and AI applications, user-based services | 10 | 3.5 | Blue Horizon Project (AI) Research and Innovation Action) project: 2100 | |
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| 11. Accelerating the clean energy transition in Africa and the Mediterranean | Accelerating demonstration of clean energy projects in Africa and the Mediterranean | All areas and topics of the Green Deal call are open to international cooperation. In addition to embedding international cooperation to the other topics, a separate topic is proposed with a focus on clean energy solutions in Africa and the Mediterranean. | This topic aims to support the transition via demonstration projects and cooperation and support across continents. The topic is open to international cooperation and support across continents. The Green Deal call also aims to support the transition via demonstration projects and cooperation and support across continents. The Green Deal call also aims to support the transition via demonstration projects and cooperation and support across continents. | Activities under this topic will include the setting up of dedicated platforms for supporting demonstration of clean energy transition involving a variety of public and private stakeholders at the national and local level while partnering with their counterparts from EU Member States. | | | Horizon Europe (IA) projects 2021-2024 (the project is expected to start in 2021 and end in 2024) | Develop tailored value chain approaches (local context), including material supply chain, and skills levels identification of technical, vocational and educational needs, proposal training, and qualification activities. The demonstration initiative will be implemented in Africa, relevant African partners to implement the project are expected to participate in the project. |
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Avrupa Komisyonu Başkanı Ursula VON DER LEYEN'in yeni görevine gelişi ile oluşturulan inisiyatif kapsamında Avrupa Birliği (AB)'nin 2050 yılına kadar karbonsuz ekonomiye geçişinin tamamlanması hedeflenmektedir. Bu hedefin gerçekleştirilmesi amacıyla Komisyon "Sürdürülebilir Avrupa Yatırım Planı"nı yayınlamıştır. Plan kapsamında 2027 yılı sonuna kadar 1 Trilyon Avro'luk AB bütçesinin sürdürülebilir yatırımlara ayrılması hedeflenmektedir.

Ufuk2020 AB Yeşil Mutabakatı Çağrısı

Kaynak: TÜBİTAK ve Avrupa Komisyonu

11 Çağrı Alanı

20 Çağrı Konusu - 1 Milyar € Bütçe

- İklim değişikliği ile mücadele, sektörler arası zorluklar
- Temiz, ulaşılabılır ve güvenli enerjiyi sağlanması
- Enerji ve kaynak verimli binalar
- Sürdürülebilir ve akıllı ulaşım
- Tarladan sofraya
- Biyoçeşitlilik ve ekosistem hizmetlerinin geri kazanılması
- Sıfır kirlilik, toksik olmayan ortam
- Avrupa Yeşil Anlaşmasının desteklenmesi için bilgi birikiminin güçlendirilmesi
- Vatandaşların iklim nötr, sürdürülebilir bir geleceğe geçiş için güçlendirilmesi
- Uluslararası İşbirliği

- Topluma hızlı bir şekilde yansıtacak hızlı ve somut sonuçların elde edilmesi
- Yapısının klasik Ufuk2020 çağrılarından farklı olacak olması
- İnovasyon ve demonstrasyon odaklı çağrılarla ağırlıklı olarak yer alması
- Çağrı altında az sayıda başlık olması; böylece etkili büyük projelerin desteklenmesi
- Sosyal Bilimler alanına alt çağrı başlıklarında değinilmesi
- Ufuk2020 Değerlendirme Sisteminin Kullanılması
- Eylül 2020 çağrının açılması ve Ocak sonu kapanması, 2021 sonu hibe sözleşmesi

Faydalı Linkler

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| Avrupa Komisyonu "Avrupa Yeşil Mutabakatı" (Mableri ve Konuları, Amaç, Kapsam, Desteklenen Faaliyetler, Beklenen Etkiler ...) |
| TÜBİTAK "Avrupa Yeşil Mutabakat Çağrısı" ile ilgili sunumlar |
| Ulk2020 TÜBİTAK Ulusal İrtibat Noktaları |
| Yeşil Mutabakat ile ilgili teknoloji geliştirilen start-up'ları araştırıyorsanız... |
| Doğayı koruma, iklim değişikliği, çevre konularında faaliyetlerde bulunan kuruluşlara, özellikle de ödüllü LIFE projeleri şipleri için... |
| Enerji kullanımımızın çevreye ve klime verdiği zarar azaltmak için gelişmiş ICT teknolojilerini kullanan ortaklar arıyorsanız... |
| Tarıftan sofraya alanında projelerle ilgili partner bulmak istiyorsanız... |

https://ec.europa.eu/info/research-and-innovation/strategy/european-green-deal/call_en

<https://h2020.org.tr/tr/haberler/ulk2020-programi-green-deal-yesil-mutabakat-cagrisi-cerimic-bilgi-gumireckent>

<https://h2020.org.tr/tr/iletisim>

<https://sited.eu/articles/meet-europes-green-deal-startup-heroes/>

<https://ec.europa.eu/essme/en/news/2020-life-awards-finalists-announced>

<https://ec.europa.eu/digital-single-market/en/programme-and-projects/eu-funded-projects-energy>

<https://ec.europa.eu/eip/article/en/eip-agri-projects>