



INT6063: Improving Quality of Radiotherapy, Nuclear Medicine and Radiology Services Through the Implementation of Quality Management Programs

Objective

To improve the quality of Nuclear Medicine, Radiology and Radiation Oncology practice by implementing quality management systems in the clinical practice.

Project activities

1. To build human capacity in QUANUM, QUAADRIL and QUATRO.
2. To develop training and supplementary material for auditors.
3. To enhance the capacity of the auditors through interregional training courses and workshops.
4. To implement QUATRO, QUANUM and QUAADRIL auditing missions.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States in Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Improved quality of health care and radiation medicine services in Member States.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	210 000	15 750
2021	343 350	69 825
2022	117 500	288 750
2023	126 000	115 500

Project total: 1 286 675





INT6064: Supporting Member States to Increase Access to Affordable, Equitable, Effective and Sustainable Radiation Medicine Services within a Comprehensive Cancer Control System

Objective

To improve the readiness of health systems in providing access to affordable, qualitative, effective and sustainable radiation medicine services within a comprehensive cancer control approach.

Project activities

1. To implement comprehensive cancer control assessments (imPACT reviews) to support planning and implementation of IAEA cancer-related projects.
2. To develop strategic documents on cancer control as a follow up to imPACT reviews, and in support of planning and implementation of IAEA cancer-related projects.
3. Targeted outreach to traditional and non-traditional donors to mobilize resources for unfunded cancer-related activities in Member States or other IAEA projects.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Availability of evidence, strategies and resources for efficient and effective planning and implementation of cancer control capacity development activities in IAEA Member States is improved.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	—	622 650
2021	—	622 650
2022	—	736 050
2023	—	736 050

Project total:

2 717 400





RAF6055: Improving the Quality of Radiotherapy in the Treatment of Frequently Occurring Cancers (AFRA)

Objective

To enhance the quality of the delivery of radiotherapy services in AFRA Member States through harmonized clinical training schemes and sensitization of policy makers.

Project activities

Building the human capacity in the relevant medical institutions in the participating Member States in the following areas:

1. Optimization of 3D radiotherapy in the clinic.
2. Introduction of advanced techniques (IMRT, VMAT, SRS, SRT, SBRT, IGRT).
3. Introduction of 3D Brachytherapy.
4. Participation in the 1st Regional Conference on Medical Physics.
5. Sensitize on QMS.
6. Finalize AFRA document on audits.
7. Implement QUATRO audits.
8. Continuous Professional development Framework developed.
9. Harmonized academic programmes available.
10. Harmonized clinical training programmes available.
11. Framework for recognition of clinically qualified medical physicists developed.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa region.

EXPECTED OUTCOME

Enhanced capacity of radiation medicine professionals to treat existing and new cancer cases in Africa using new techniques.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	353 325	31 500
2021	519 750	—
2022	275 625	31 500
2023	154 350	65 625

Project total: 1 431 675





Health and
Nutrition

RAF6056: Supporting Human Resources Development in Radiation Medicine (AFRA)

Objective

To strengthen the treatment of cancer through the training and education of radiation medicine professionals in AFRA States.

Project activities

1. Reviewing regional designated centers (RDCs) delivery of training in radiation medicine.
2. Training of fellows in radiation medicine.
3. Procurement of small equipment to support training.
4. Developing a mechanism to monitor the impact of programmes on careers of fellows.
5. Developing and revising curricula where needed.
6. Drafting HR Strategy in radiation medicine.



Technical
Cooperation
Programme

For more information, please refer to the document *“Technical Cooperation: The Agency’s Proposed programme for 2020-2021”* as produced in GOV/2019/47 and its attachments.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa region.

EXPECTED OUTCOME

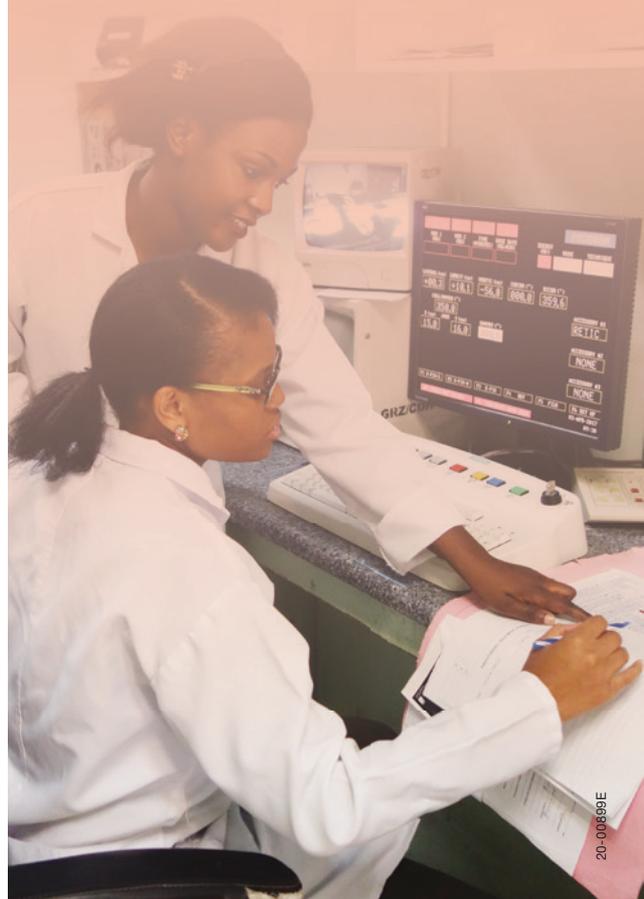
Highly qualified and clinically ready radiation medicine professionals available to deliver cancer treatment services in Africa.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	710 880	68 040
2021	724 907	102 060
2022	675 170	34 020
2023	469 580	—

Project total: 2 784 657





RLA6082: Strengthening Regional Capabilities in the Provision of Quality Services in Radiotherapy (ARCAL CLXVIII)

Objective

To contribute to increasing the quality of life of cancer patients through strengthened radiotherapy services.

Project activities

1. Establish structured and harmonized clinical training for Medical Physics (MPs) in the region.
2. Establish structured and harmonized clinical training for Radiation Oncologists (ROs) and Radiation Therapists (RTTs) in the region.
3. Develop guidelines and protocols.
4. Disseminate protocols and guidelines among the participating countries.
5. Train internal auditors' teams.
6. Implement external quality audits.
7. Elaborate and divulgate information and documents regarding the project activities with the status of hybrid imaging.



DURATION

Three years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean region.

EXPECTED OUTCOME

Services of radiotherapy treatments homogenized in the region.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	371 280	50 000
2021	227 325	254 625
2022	264 625	181 650

Project total: 1 349 505





INT6065: Contributing towards Improved Survival in Childhood Cancer Using Radiation Medicine and Nutrition

Objective

To improve paediatric cancer care and outcomes in LMICs through enhanced paediatric medical imaging diagnosis, radiotherapy treatment and nutritional support.

Project activities

1. Development of Standard Operating Procedures for childhood cancer
2. Building human capacity in paediatric radiotherapy
3. Provision of quality assurance kits and equipment
4. Evaluation of interventions in areas of radiotherapy, imaging, and nutrition.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Improved quality of paediatric cancer services by enhancing the capacities of a multidisciplinary team and implementing clinical guidelines.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	210 000	878 640
2023	343 350	1 650 070
2024	117 500	1 755 280
2025	126 000	1 715 120

Project total: 5 999 110





RAF6058: Strengthening the Capacities for Radiopharmacy and Medical Physics and Radiology for Expansion and Sustainability of Medical Imaging Services – Phase II (AFRA)

Objective

To strengthen and sustain imaging services in Africa through academic education programmes (radiopharmacy) and training as well as effective diagnostic and interventional radiological practices.

Project activities

1. Building human capacity in radiopharmacy and medical physics
2. Developing educational and training material for radiologists and radiographers to strengthen their radio-clinical interpretation and reporting of different medical imaging modalities.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

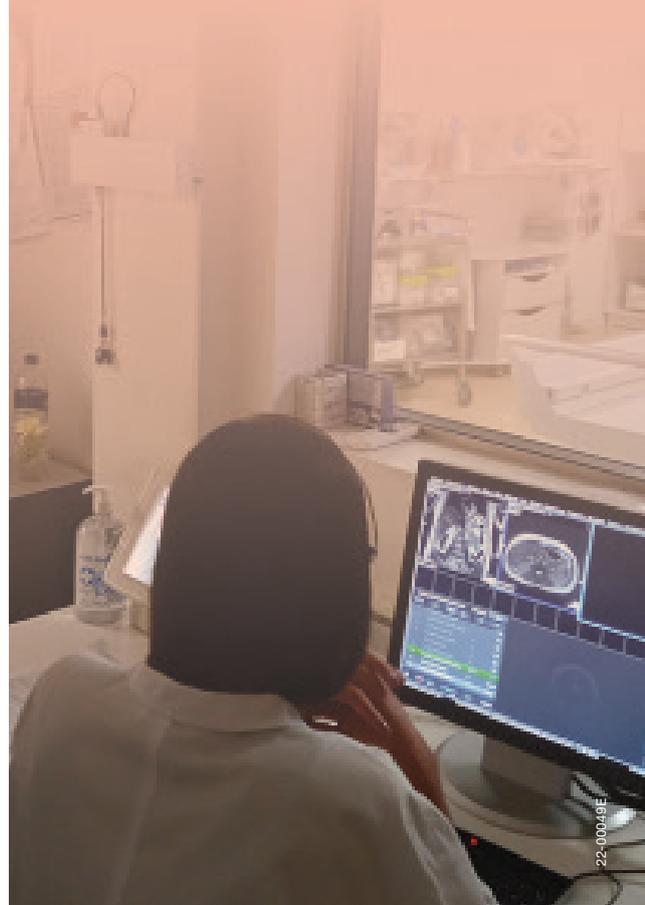
Enhanced safety and quality of medical imaging services through capacity building in radiopharmacy, medical physics and radiology.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	961 556	36 750
2023	1 084 721	221 550

Project total: 2 304 577





RAS6099: Developing Sustainable, High Quality, and Safe Medical Diagnostic Imaging and Radiotherapy Services (SAPI)

Objective

To support national health care systems in ensuring the development and sustainable implementation of high quality and safe medical diagnostic imaging and radiotherapy services for the Pacific Islands.

Project activities

1. Building human resources in Radiology in QA/QC, dosimetry, and remote QC
2. Strengthening human resources in teleradiology services
3. Enhancing nuclear medicine services in the SAPI region
4. Establishing a quality assurance and dose optimization programme
5. Establishing a cooperative network for referral and radiotherapy of cancer patients in SAPI region



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

National capacities and implementation modalities for planning and delivery of high quality and safe medical diagnostic imaging and radiotherapy services enhanced.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	99 187	211 965
2023	119 682	175 320
2024	114 689	150 300
2025	78 015	127 730

Project total: 1 076 888





RAS6100: Strengthening Clinical Application of Hypofractionated Radiotherapy (RCA)

Objective

To enhance cancer treatment in the RCA region through the application of hypofractionated radiotherapy.

Project activities

1. Building human capacity in hypofractionated radiotherapy, clinical aspects of frequent cancer sites for radiation oncologist and medical physicists, and medical physicists and radiation therapists.
2. Enhancing capacity in safety and quality of hypofractionated radiotherapy



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

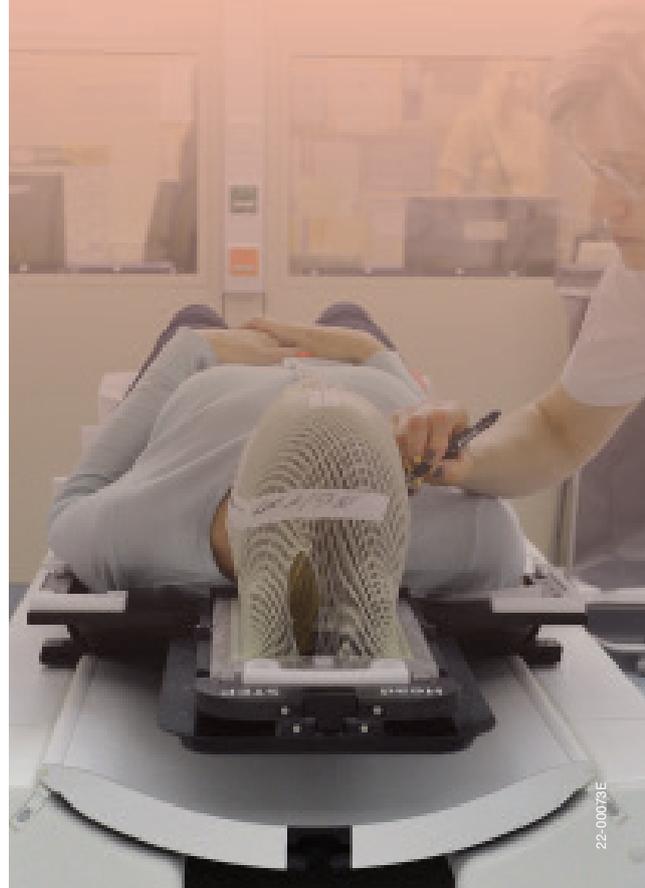
Comprehensive adaptation of hypofractionated radiotherapy from physics to clinic strengthened for efficient cancer treatment.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	118 125	5 250
2023	135 625	5 250
2024	118 125	5 250
2025	118 125	5 250

Project total: 511 000





RAS6102: Strengthening Capabilities in Nuclear Medicine, Radiation Oncology, and Radiopharmaceutical Production for Diagnostics and Treatment of Cancer and Non-Communicable Diseases (ARASIA)

Objective

To improve the life of cancer patients through the enhancement of regional best practices in multidisciplinary management of cancer and NCDs.

Project activities

1. Enhancing human capacities in radiotherapy for cancer treatment.
2. Provision of equipment, software for provision of quality services in radiotherapy for cancer treatment.
3. Enhancing human capacities in nuclear medicine/diagnostic radiology for NCD management
4. Enhancing the capabilities in the production of radiopharmaceuticals for nuclear medicine.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

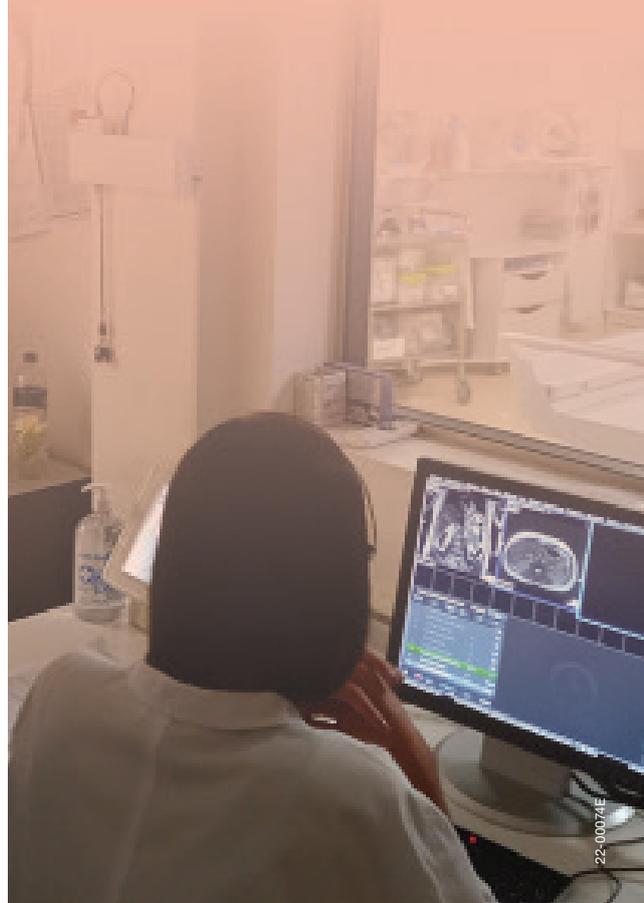
Cancer diagnostics and treatment methods and protocols of cancer and NCDs improved in ARASIA State Parties.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	247 480	515 000
2023	252 394	500 000
2024	243 300	—
2025	163 690	—

Project total: 1 921 864





RAS6104: Supporting the Improvement of Nutrition Programmes (SAPI)

Objective

To strengthen the national nutrition programmes to improve the quality of life of the population.

Project activities

1. Support to prepare an action plan per country on nutrition priorities and the role of nuclear nutrition techniques
2. Building Member States capacities to use nuclear techniques to assess body composition in children
3. Developing subregional guidance on the use of nuclear techniques to address nutrition priorities in the Pacific Island Member States and baseline body composition data in children.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Enhanced national capacity of Member States of the Pacific Islands to utilize stable isotope and complementary techniques to improve national programmes on human nutrition studies and services with emphasis on childhood nutrition studies.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	78 600	131 340
2023	87 800	52 680
2024	79 300	52 680
2025	104 550	63 590

Project total: 650 540





RAS6103: Applying Stable Isotope Techniques to Assess Protein Quality of Sustainable Food Sources for the Improvement of Maternal and Child Nutrition

Objective

To improve maternal and young child nutrition and health through the enhancement of dietary protein quality from local and sustainable food sources for accelerating the achievement of SDGs and the regional social, economic, and environmental development.

Project activities

1. Building capacity in the participating Member States on IAAO and other standard methods to determine metabolic availability of amino acids in food
2. Enhance regional laboratory capacity to apply the stable isotope technique and analyze IAAO
3. Supporting Member States to get ethics approval
4. Collecting and analysing data on protein quality from plant based diets and link to maternal child health.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Data on protein quality of local/ indigenous food sources commonly consumed in Asia and the link to maternal and child nutrition and health established.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	92 100	—
2023	91 500	132 000
2024	108 780	—
2025	170 100	—

Project total: 594 480





RLA6085: Strengthening the Capacities of Cyclotron/Positron Emission Tomography Centres in the Region (ARCAL CLXXXIII)

Objective

To improve the management of cancer patients through timely and effective diagnosis.

Project activities

1. Exchanging of experience on the operational aspects of cyclotrons, the production and quality control of FDG, PSMA, and NaF, and their clinical applications
2. Building capacity in the operation and maintenance of cyclotrons
3. Provision of equipment related to PET quality control
4. Supporting guidance and materials provision for countries with plans to introduce the first cyclotron/PET facility.



DURATION

Three years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

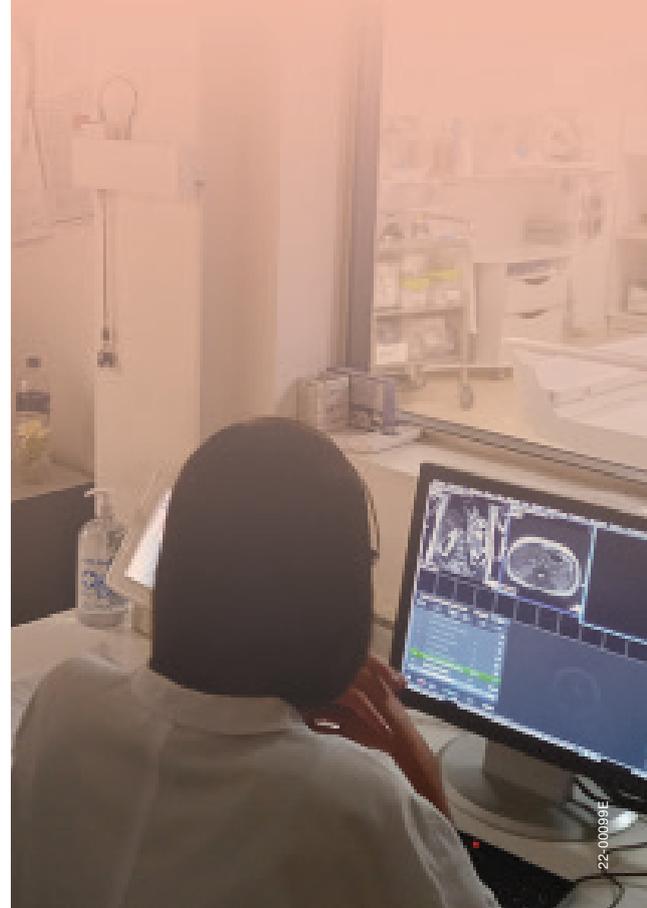
Enhanced human capacities to increase the contribution of selected PET radiopharmaceuticals in cancer management.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Fund
2022	261 750	83 250	—
2023	157 500	78 750	3 150
2024	280 175	84 000	16 800

Project total: 965 375





RLA6086: Integrating Nuclear Medicine Techniques in a Multimodality Approach in Cardiology for Early Diagnosis and Risk Stratification of Cardiovascular Disease in Latin American Women (ARCAL CLXXXV)

Objective

To improve care of patients with Chronic Noncommunicable Diseases, in particular cardiovascular disease in Latin American women.

Project activities

1. Establishing a reference frame regarding epidemiological situation/atherosclerotic risk factors and utilization of imaging techniques in the management of CVDs in Latin American women
2. Building human capacity on the use of nuclear techniques, imaging multimodality and their benefits in the management of CVDs in Latin American women
3. Establishing a consensus document on the utilization of multimodality imaging in CVDs in women.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

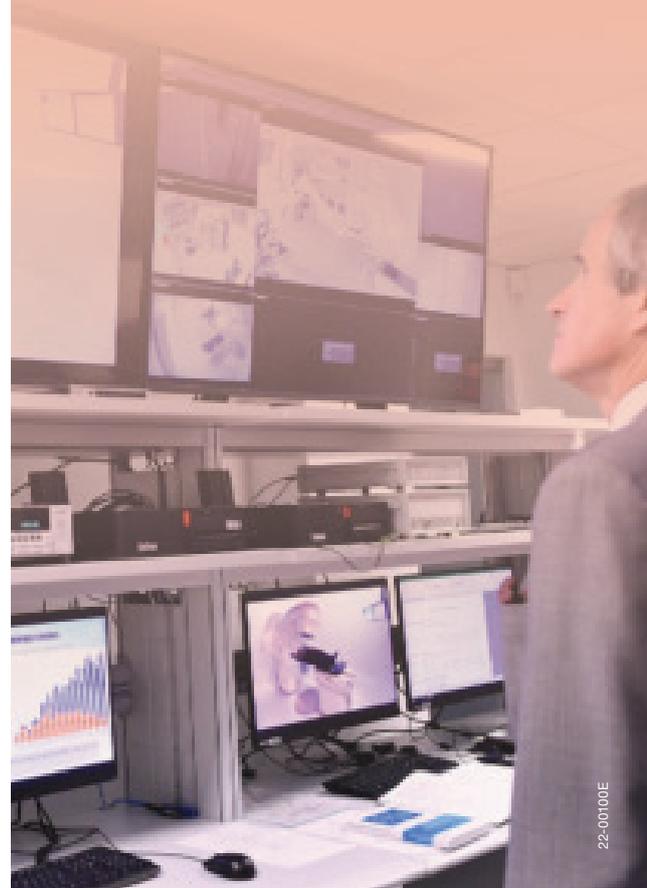
Improving early diagnosis and risk stratification in IHD and cardiotoxicity in Latin American women.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	141 750	50 000
2023	145 950	—

Project total: 337 700





RLA6087: Building Capacity in the Use of Stable Isotope Techniques to Address Childhood Obesity in English-Speaking Member States

Objective

To contribute towards the prevention of childhood obesity and later non-communicable diseases through building capacity for measuring body composition and collecting childhood nutrition related data.

Project activities

1. Human capacity building in using stable isotope techniques to measure body composition
2. Provision of equipment to the national laboratories for using stable isotope techniques to measure body composition
3. Establishing protocols and standard operating procedures for the use of stable isotopes to study and assess body composition in children
4. Establishing a regional database on body composition in children; and compiling a report on body composition in children in the English-Speaking Caribbean.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Increased capacity to assess childhood malnutrition/obesity using stable isotope techniques in the Caribbean.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	149 510	86 000
2023	124 690	35 000
2024	125 500	—
2025	67 410	—

Project total: 588 110





RLA6088: Strengthening Radiation Medicine Services through Human Capacity Development, Improved Quality Assurance, Quality Control and Networking

Objective

To improve the management of patients in nuclear medicine, diagnostic radiology and radiotherapy through the provision of high-quality diagnostic and therapeutic services.

Project activities

1. Defining standardised sub-regional guidelines for education and training of medical physicists
2. Adopting qualification programme for medical physics professionals
3. Provision of quality control equipment to support training needs
4. Building human capacities in radiation medicine
5. Establishing an online platform for health professionals working in radiation medicine.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

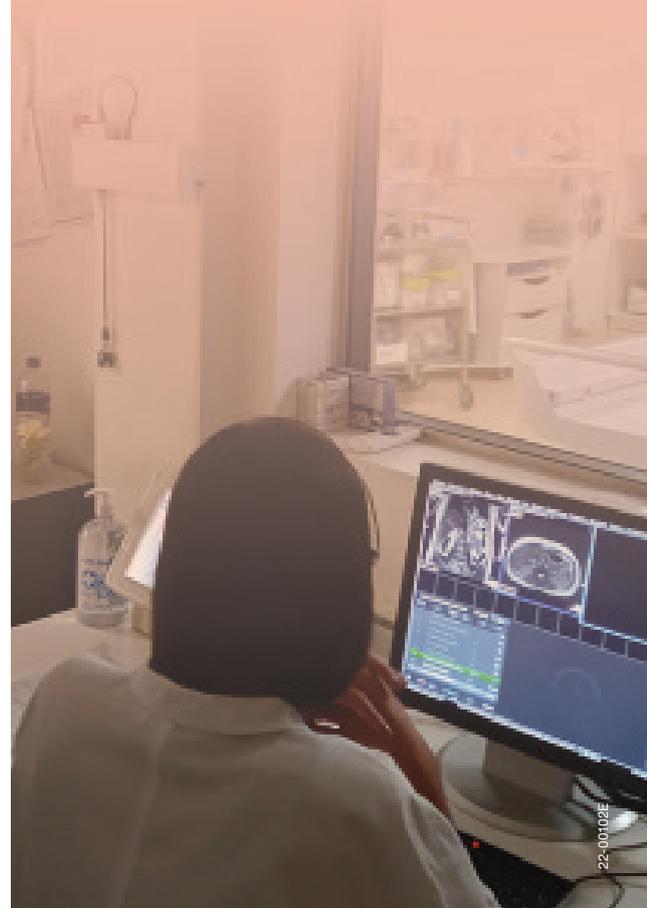
Improved quality assurance and dosimetry programmes in radiation medicine at the national level toward establishing quality management systems across the region.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	157 500	—
2023	212 250	70 000
2024	246 015	136 080
2025	99 750	—

Project total: 921 595





RLA6089: Using Stable Isotopes to Reduce Nutritional Risks in Pregnant Women and Their Impact on Infants (ARCAL CLXXXIV)

Objective

To prevent child malnutrition and the risk of developing non-communicable diseases in later life.

Project activities

1. Enhancing institutional capacity by provision of laboratory consumables for field implementation and other laboratory equipment
2. Building capacity in standardization in the stable isotope technique for the evaluation of body composition, anthropometry, electrical bioimpedance, biochemical methods and procedures for breastfeeding promotion activities
3. Establishing a regional database, and identify any discrepancies between countries.



DURATION

Three years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

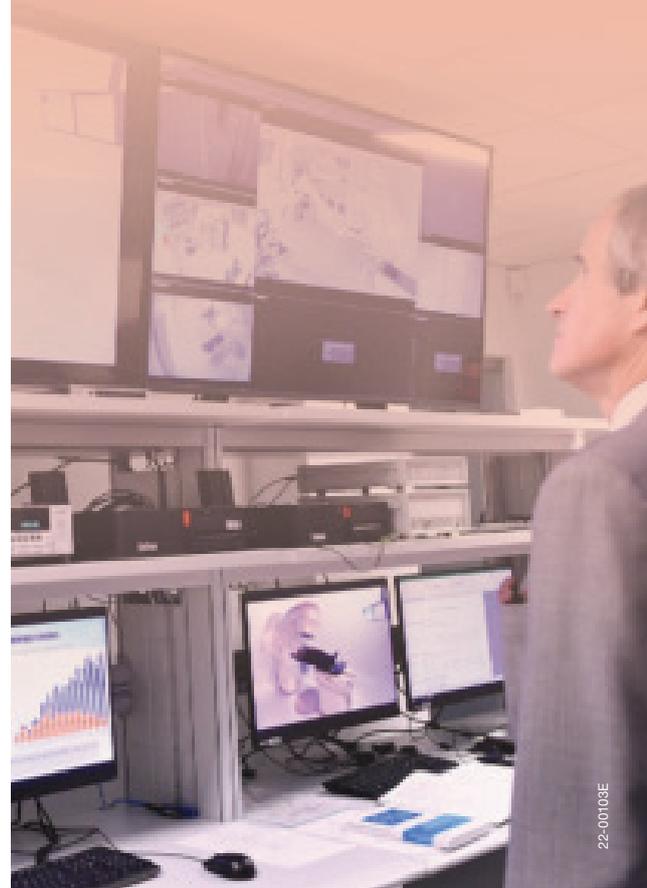
Regional capacity strengthened to improve infant health through the identification of maternal malnutrition and its impact on offspring using stable isotopes.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	197 277	29 216
2023	100 750	84 235
2024	96 250	—

Project total: 507 728





RLA6090: Strengthening Radiotherapy Management for the Treatment of Cervical Cancer in Latin America and the Caribbean (ARCAL CLXXXII)

Objective

To improve the quality and safety of radiotherapy procedures in cervical cancer therapy through critical analysis of the practices and processes involved in the region.

Project activities

1. Enhancing capacities for quality care in reference hospitals in participating Member States
2. Enhancing standards and QA protocols for radiotherapy for cervical carcinoma
3. Enhancing capacities in auditing methodology for cervical cancer
4. Provision of equipment for enhancing the quality of cervical cancer management
5. Collecting data on brachytherapy equipment in LAC
6. Finalizing ImpACT review in some Member States.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

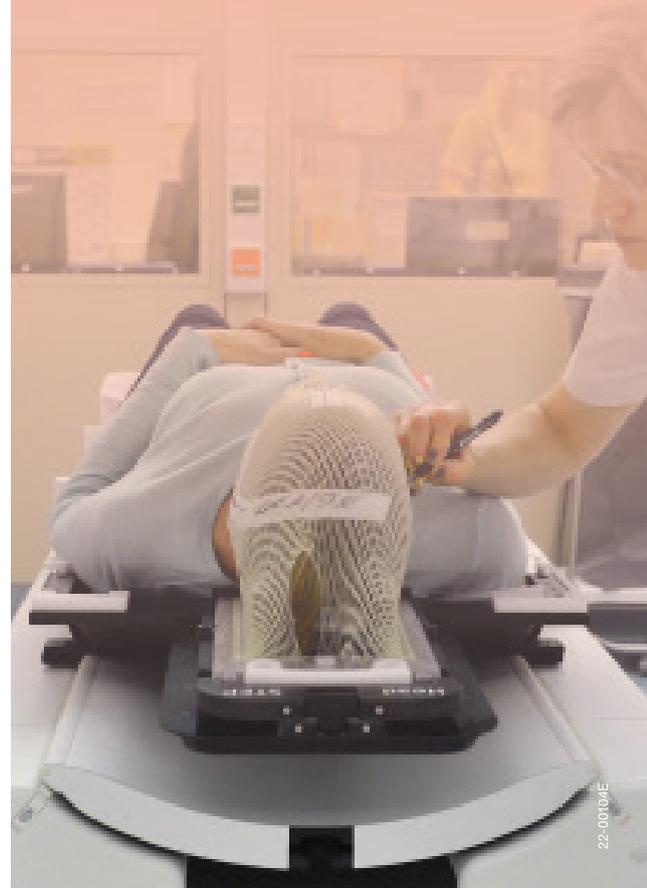
Capacity to develop and implement cervical cancer control and quality assurance programs improved.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	109 200	500 000
2023	280 770	250 000
2024	149 625	719 600
2025	296 415	264 700

Project total: 2 570 310





RLA6091: Enhancing Capacity Building of Medical Physicists to Improve Quality and Safety in Medical Practices

Objective

To improve the quality and safety in diagnostic and interventional radiology and nuclear medicine services through strengthening knowledge, skills and competences of medical physicists, contributing to patient care improvement and reducing potential risks of adverse effects of radiation.

Project activities

1. Initiating clinical training programmes in Member States updated to new IAEA recommendations
2. Establishing a network of reference hospitals with qualified medical physicists, QC/QA procedures, dose assessment, monitoring and dose management, and institutional DRLs.
3. Building capacity in complex technologies related to nuclear medicine.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

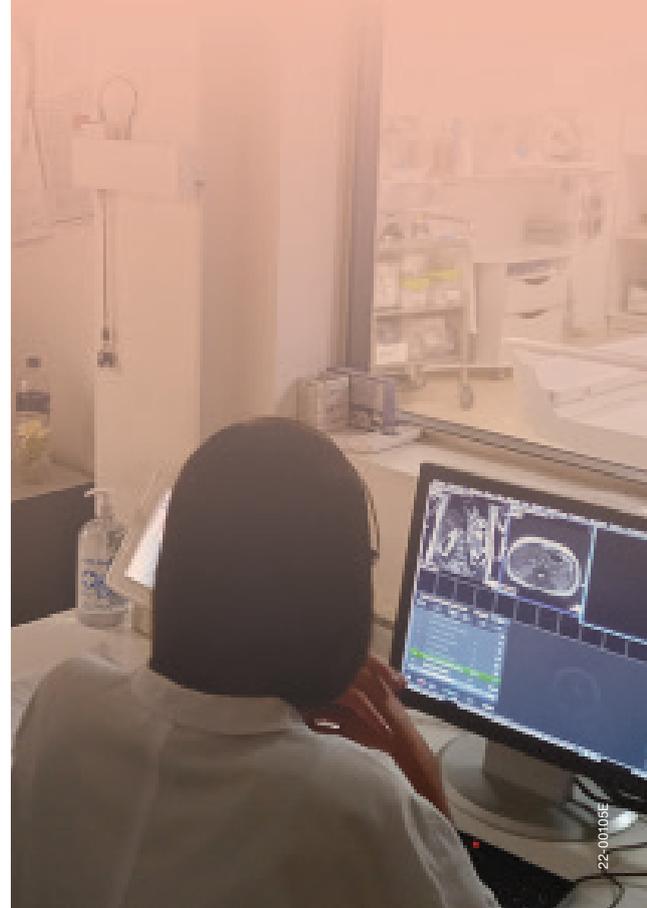
Knowledge and skills of medical physicists improved in the region.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	176 400	126 460
2023	157 500	165 570
2024	166 425	—
2025	166 950	—

Project total: 959 305





INT5156: Building Capacity and Generating Evidence for Climate Change Impacts on Soil, Sediments and Water Resources in Mountainous Regions

Objective

To increase the resilience of mountainous populations and ecosystems towards the impacts of climate change.

Project activities

1. To build human resources capacity in nuclear and isotopic techniques for monitoring area-wide climate change impacts on land-water-ecosystem interactions and integrated watershed management.
2. To hold technical meetings for data synthesis and integration over drivers and sites.
3. To provide expert support to benchmark sites for monitoring climate change impacts on land-water-ecosystem interactions in high mountain regions.
4. To conduct isotope and related laboratory analyses of soil, water and sediment samples collected during expert missions (of at least 1000 samples).
5. To conduct integrated watershed assessments.
6. To support regional exchange of knowledge and networking through workshops and meetings.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States in Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Strengthened evidence-based decision making on land and water management for climate change adaptation in mountainous regions.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	456 791	—
2021	433 973	—
2022	226 500	154 350
2023	147 000	128 350

Project total: 1 546 964





RAF5082: Enhancing Veterinary Diagnostic Laboratory Biosafety and Biosecurity Capacities to Address Threats from Zoonotic and Transboundary Animal Diseases (AFRA)

Objective

To establish and implement biosafety and biosecurity regulations for and in veterinary diagnostic laboratories and to enhance capacities for bio-threat action.

Project activities

1. Expert services to develop procedures and documentation and to provide technical support.
2. Risk-based assessment of biosafety and bio security regulations.
3. Designing national biological safety and security (BS&S) regulation.
4. Designing laboratory infrastructure according to BS&S.
5. Implement BS&S in diagnostic processes.
6. Harmonize diagnostic protocols and methods to meet BS&S regulations.
7. Establish a regional bio-threat reduction plan.
8. Establish a network of local experts for dissemination of BS&S standards information to Governments and institutions.
9. Provision of essential laboratory equipment, consumables and reagents.

DURATION

Five years

BENEFICIARY COUNTRIES

Member States from Africa region.

EXPECTED OUTCOME

Biosafety and biosecurity regulations for veterinary laboratories are developed and implemented in each Member States.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	309 950	73 500
2021	500 500	—
2022	252 600	200 000
2023	247 000	91 875
2024	252 500	91 875

Project total: 2 019 800





RER5026: Enhancing the Capacity to Integrate Sterile Insect Technique in the Effective Management of Invasive Aedes Mosquitoes

Objective

To protect human health from mosquito-borne diseases and to contribute to improve the quality of life.

Project activities

1. Establishing awareness and support of the policy makers and other stakeholders.
2. Enhancing the capacity in mosquito mass rearing and sterilizing technique and releasing of sterile males and monitoring results.
3. Conducting feasibility studies for informed decision on pilot mass rearing facilities or importation of sterile males.
4. Harmonizing the methodology and adaptation of standard operating procedures (SOPs) in the European context.



DURATION

Three years

BENEFICIARY COUNTRIES

Member States from Europe region.

EXPECTED OUTCOME

Capabilities of participating Member States improved to enhance application of SIT within their integrated environment-friendly mosquito control methods for invasive Aedes mosquito.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	—	354 800
2021	—	133 350
2022	—	131 500

Project total:

619 650





RLA5084: Developing Human Resources and Building Capacity of Member States in the Application of Nuclear Technology to Agriculture

Objective

To raise awareness among participating Member States of the various applications of nuclear science and technology in agriculture as well as develop their human resource and institutional capacity in the use of these technologies towards the Region's effort to improve agricultural productivity.

Project activities

1. Supporting the establishment of laboratory networks among regional animal health, plant health and food safety laboratories.
2. Supporting activities to strengthen database(s) to house laboratory network information.
3. Conducting needs assessment to identify existing capabilities in the areas of plant mutation breeding, biotechnology and water and nutrient use efficiency in the region.
4. Building human resource capacity in mutation induction and mutation breeding, invitro techniques and micropropagation, and soil, nutrient and water management best practices for agricultural crops.
5. Conduct needs assessment to identify existing capabilities in the use of integrated pest management including the SIT in the region.
6. Building human capacity in pest prevention, including systematic operation of pest surveillance networks and emergency response, particularly in the use of integrated pest management (IPM) and SIT.
7. Conduct needs assessment to identify existing capabilities related to animal breeding, improved animal nutrition and rapid disease diagnosis in the region.
8. Building human capacity in early and rapid detection of animal diseases, and genetic characterization and breeding improvement in livestock.
9. Capacity building in the use of new techniques in food traceability and food authenticity.
10. Conducting sensitization sessions to raise awareness on the use of nuclear applications related to Food Safety and Agriculture
11. Producing awareness material on the application of nuclear technology in the priority areas of the project.



DURATION

Three years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean region.

EXPECTED OUTCOME

Improved awareness, knowledge and application of nuclear science and technology within the agriculture sector of Member States in the Caribbean Region.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	124 910	—
2021	77 490	94 860
2022	73 240	104 790

Project total: 475 290





INT5157: Supporting National and Regional Capacity in Integrated Action for Control of Zoonotic Diseases

Objective

To enhance national and regional capacity in the surveillance, detection and control of emerging or re-emerging zoonotic diseases (including Pillar I of ZODIAC).

Project activities

1. Mapping institutional capabilities of Member States
2. Establishing human and institutional capacities for early detection of emerging or re-emerging zoonotic diseases
3. Establishing ZODIAC Collaborating Centres in all regions.
4. Implementing disease surveillance, monitoring and tracing systems, allowing for early warning.



DURATION

Five years

BENEFICIARY COUNTRIES

Member States in Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Enhanced technical and operational capabilities with a solid global network of national and sub-regional diagnostic laboratories with the capacity to conduct coordinated surveillance, monitoring, early detection and diagnosis of emerging and re-emerging zoonotic diseases.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2021	—	17 644 442
2022	—	16 184 842
2023	—	16 688 842
2024	—	17 760 442
2025	—	17 248 042

Project total: 85 526 610





INT5158: Strengthening Member State Capacities to Combat Banana Fusarium Wilt (TR4) through Early Detection, New Resistant Varieties, and Integrated Management

Objective

To strengthen Member State capacities in the prevention and containment of Fusarium Wilt (TR4) disease in banana through surveillance, early detection, genetic resistance and integrated management.

Project activities

1. Building human and institutional capacities in disease surveillance, detection and containment
2. Building human and institutional capacities in TR4 prevention, surveillance and reporting, containment and integrated management options
3. Supporting Member States in developing native and mutant germplasm of banana and plantains with confirmed resistance to Fusarium TR4.



DURATION

Five years

BENEFICIARY COUNTRIES

Member States from Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Enhanced technical and infrastructure capacities at the institutional level and within national, regional and global networks for the detection, surveillance, genetic resistance and management of banana Fusarium wilt (TR4).

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	—	1 674 000
2023	—	830 800
2024	—	1 088 700
2025	—	771 000
2026	—	664 400

Project total: 5 028 900





RAF5085: Providing Emergency Support In Case of Outbreaks – Footnote a (AFRA)

Objective

To support Member States to respond to and control emergency situations that affect the well-being of the population and the socioeconomic context.

Project activities

1. Providing Member States with ad hoc technical assistance not included in the approved regular programme in the form of the provision of equipment and materials
2. Organizing national or regional training courses and advisory missions.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

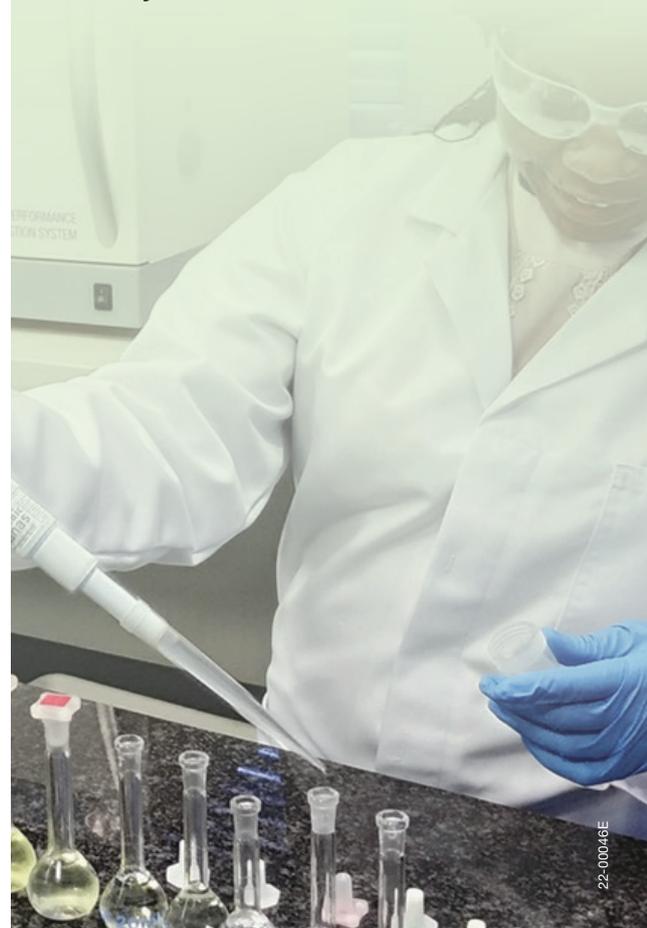
Member States supported to respond adequately to an arising emergency situation in a country or region.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	—	450 950
2023	—	450 950
2024	—	450 950
2025	—	450 950

Project total: 1 803 800



RAF5087: Enhancing Regional Capacity for the Implementation of the Sterile Insect Technique as a Component for Area-Wide Tsetse and Trypanosomosis Management (AFRA)

Objective

To enhance population control of tsetse species transmitting African trypanosomosis with the adoption of the sterile insect technique as a component of area-wide integrated vector management.

Project activities

1. Supporting Member States to establish an entomological and parasitological baseline data for assessing the socioeconomic feasibility of tsetse and trypanosomosis (T and T) intervention with the SIT
2. Enhancing institutional capacity in tsetse mass rearing facilities in participating Member States
3. Establishing capabilities for data management, standardization, storage, and analysis of tsetse flies established at the regional level; and
4. Establishing collaboration mechanisms with other T and T programmes to harmonize policy and strategies



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

Human health improved, livestock production and productivity in expanded areas that are free of tsetse and trypanosomosis increased.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	329 750	—
2023	407 155	62 475
2024	342 235	68 250
2025	293 200	—

Project total: 1 503 065





RAF5089: Strengthening the Capacities of National Veterinary Laboratories for the Early Warning, Control and Prevention of Outbreaks of Animal and Zoonotic Diseases (AFRA)

Objective

To strengthen regional and national capabilities for the early detection, identification, and control of transboundary animal and zoonotic diseases, using nuclear and nuclear derived techniques, such as molecular diagnostic, serology, genomics, and proteomics technologies.

Project activities

Strengthening the capacities and expertise of national veterinary laboratories in the early detection and identification of animal and zoonotic diseases of regional and national concern through training and equipment provision



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

Capacities to detect, identify, and control priority transboundary animal and zoonotic diseases and to assess the risk of antimicrobial resistance improved.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	1 123 952	200 000
2023	1 330 948	200 000
2024	1 293 000	200 000
2025	1 293 000	200 000

Project total: 5 840 900





RAS5092: Increasing Crop Productivity under Drought Conditions by Using Isotope Techniques to Optimize Water Usage (RCA)

Objective

To contribute to food security by improving crop productivity under water limiting conditions using isotope and related techniques.

Project activities

1. Building human capacity in basic isotopic techniques, field work design, sampling procedures, laboratory method development and remote sensing
2. Building human capacity in advanced isotopic and related techniques to understand water use efficiency of selected crops
3. Conduct field work, sample preparation and sample analysis
4. Provision of minor equipment, accessories and consumable chemicals
5. Establish protocols based on isotope techniques applied.

DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Productivity of selected crops increased by improving water use efficiency.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	—	158 250
2023	—	116 600
2024	—	185 850
2025	—	110 250

Project total: 570 950





RAS5093: Strengthening Climate Smart Rice Production towards Sustainability and Regional Food Security through Nuclear and Modern Techniques

Objective

To facilitate the development of climate smart agricultural practices in rice production towards sustainability and regional food security through integrated application of nuclear techniques coupled with modern technologies.

Project activities

1. Capacity building of participating countries on the use of modern technologies and nuclear techniques for smart agriculture
2. Conducting field experiments and pilot project in participating Member States.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Livelihoods and capability of rice farmers to withstand the impact of climate change towards a sustainable rice production system improved.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	190 050	390 000
2023	116 025	—
2024	47 775	—
2025	136 500	—

Project total: 880 350





RAS5094: Promoting Sustainable Agricultural and Food Productivity in the Association of Southeast Asian Nations Region

Objective

To enhance the capacities in ASEAN countries in promoting sustainable agriculture and food productivity and trade.

Project activities

1. Building human and institutional capacities in mutation breeding and associated biotechnologies
2. Define protocols to be implemented by each participating institution
3. Provision of laboratory equipment, and field equipment
4. Building human capacity in climate smart agricultural practices for enhanced rice and maize production.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Capacities built in crop adaptation to climate change through mutation breeding, and in adopting and scaling up CSA practices to enhance the production of rice, maize, and other crops in the ASEAN region.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	208 260	—
2023	255 010	334 020
2024	298 140	144 100
2025	99 120	—

Project total: 1 338 650





RAS5095: Enhancing the Capacity and the Utilization of the Sterile Insect Technique for Aedes Mosquito Control

Objective

To enhance the capacity of Member States in Asia Pacific region in the applications of sterile insect technique (SIT) for Aedes mosquito control and its impact on mosquito borne disease prevention.

Project activities

1. Building human capacity on mass-rearing, irradiation, handling and quality control
2. Building human capacity on mosquito surveillance techniques, packing, transportation and release
3. Provision of equipment for national mass-rearing facilities
4. Provision of equipment for handling, transport and release of sterile male mosquitoes for SIT pilot trials
5. Building human capacity on risk assessment and cost-effective analysis.

DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Enhanced capacity of Member States in large scale utilizations of sterile insect technique (SIT) for Aedes mosquito control and mosquito-borne disease prevention.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	241 750	41 160
2023	155 400	369 490
2024	252 900	—
2025	73 500	—

Project total: 1 134 200





RAS5096: Strengthening Multi-Stakeholder Food Safety Monitoring Programmes for Chemical Contaminants and Residues in Plant and Animal Products Using Nuclear/ Isotopic Techniques

Objective

To improve food safety control systems that better safeguard consumers from harmful contaminants, residues, and associated hazards, and enhance competitiveness of agricultural exports through a multi-stakeholder approach.

Project activities

1. Strengthening analytical knowledge and capabilities for residue/contaminants analysis
2. Developing monitoring programmes on chemical contaminants and residues in plant and animal products
3. Implement sampling and analysis of residues/contaminants in a range of food matrices
4. Training on production of reference/PT materials to enhance testing of chemical residues and contaminants in plant and animal products
5. Undertake sampling and gathering reliable occurrence data on contaminants/residues of interests in targeted food matrices
6. Sharing protocols/residue data and other information among the counterpart institutes
7. Prepare for the process of accreditation of techniques and/or laboratories; include facilitating proficiency testing (internal or external) and inter-laboratory studies.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Strengthened national and region capacity in implementing food safety monitoring plans for chemical contaminants and residues in plant and animal products using nuclear/ isotopic and complementary analytical techniques.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	217 030	247 000
2023	537 100	30 000
2024	435 125	210 250
2025	94 500	110 250

Project total: 1 881 255





RAS5097: Strengthening and Harmonizing Surveillance and Suppression of Fruit Flies

Objective

To enhance agricultural productivity by supporting the production of fruit fly free fruits and vegetables, meeting international standards.

Project activities

1. Implementing and enhancing national trapping system in the participating countries
2. Enhancing diagnostic capabilities of fruit fly identification
3. Supporting the improvements of the fruit fly sampling laboratory
4. Establishment and maintenance of the databases
5. Facilitating the information sharing among participating Member States



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

National IPM (including SIT) strategies for fruit fly control based on pre-season, in-season and post-harvest techniques adapted in participating MSs, and networking among the countries strengthened.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Fund
2022	99 750	324 000	310 000
2023	141 225	266 150	310 000
2024	156 450	254 550	310 000
2025	91 350	210 250	310 000

Project total: 2 783 725





RAS5098: Improving the Resilience of Crops to Climate Change through Mutation Breeding – Phase II (SAPI)

Objective

To enhance food security through the use of new mutant varieties with increased productivity and better adaptation to biotic/abiotic stress, as well as the ability to plan and manage national mutation breeding programmes as an integral part of the national agricultural programme.

Project activities

1. Building human capacity in the application of molecular techniques in crop improvement
2. Building human capacity in invitro techniques in mutation breeding
3. Provision of equipment for designated laboratories.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Enhanced national capacities for the utilization of mutation breeding techniques to achieve higher productivity/production and crop diversification.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	95 350	99 270
2023	105 375	144 000
2024	110 270	87 930
2025	112 000	87 930

Project total: 842 125





RAS5099: Developing Climate Smart Crop Production including Improvement and Enhancement of Crop Productivity, Soil and Irrigation Management, and Food Safety Using Nuclear Techniques (ARASIA)

Objective

To establish and strengthen climate smart agriculture practices to improve crop production, and enhance nutrient and water efficiency, and food safety in the ARASIA region.

Project activities

1. Building capacity in improving soil fertility, nutrient and water use efficiencies and reducing GHGs
2. Developing mutant lines, varieties tolerant and resistant to abiotic and biotic stress on crops
3. Upgrading infrastructure and facilities for mutation breeding
4. Building capacities for residue monitoring
5. Developing laboratory quality assurance and control
6. Strengthening analytical tools and techniques and develop or enhance sharing of analytical and sampling methods.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Holistic climate smart agriculture practices in crop production, nutrient, soil and water usage, and enhanced food safety control established and applied.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	319 170	451 875
2023	334 120	360 000
2024	392 785	500 000
2025	129 250	—

Project total: 2 487 200





RLA5085: Strengthening the Capacity of Official Laboratories for Monitoring and Response to an Outbreak of Priority Animal and Zoonotic Diseases (ARCAL CLXXIV)

Objective

To strengthen diagnostic capacity building of official veterinary laboratories in the Latin American and the Caribbean region for monitoring and responding to outbreaks of priority animal and zoonotic diseases.

Project activities

1. Building capacities in advanced molecular technologies for genetic differentiation of animal pathogens and zoonotic diseases in selected laboratories in the Latin America region
2. Establishing and harmonizing diagnostic procedures for priority animal and zoonotic diseases, including standard operating procedures, verification methodologies, quality assurance and quality control protocols across participating laboratories
3. Integrating diagnostic procedures on ISO 17025 in all participating Member States
4. Disseminating informative material on the five diseases with essential information on prevention measures.

DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Improved diagnostic capabilities and laboratory response for priority animal and zoonotic diseases in Latin America and the Caribbean.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Fund
2022	167 175	90 000	4 200
2023	196 365	175 400	5 670
2024	190 050	—	7 350
2025	101 550	50 000	6 300

Project total: 994 060





RLA5086: Decreasing the Mortality Rate of Rainbow Trout Associated with Infectious Pancreatic Necrosis Virus and Emerging Diseases Using Molecular and OMIC Techniques (ARCAL CLXXV)

Objective

To contribute to the strengthening of trout farming in the Latin American and Caribbean region.

Project activities

1. Elaborating on communication and outreach strategy and material (web articles, video, social media, guidebook)
2. Identifying potential candidate molecular markers
3. Setting up a PCR protocol to detect molecular markers and analyze molecular raw data
4. Establishing parameters and criteria for the selection of trout resistant to IPNV
5. Establishing an integrated system for early detection of diseases.

DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Increased population of rainbow trout resistant to infectious diseases, especially infectious pancreatic necrosis (IPN).

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Fund
2022	153 425	—	3 150
2023	113 925	80 000	3 150
2024	75 675	—	4 200
2025	143 745	—	6 300

Project total: 583 570





RLA5087: Validating the Sterile Insect Technique for the Control of the South American Fruit Fly (ARCAL CLXXVI)

Objective

To promote plant health, food security and food safety through the application of the sterile insect technique (SIT) and the establishment of areas with low prevalence of fruit flies.

Project activities

1. Building capacity in the genetic sexing strain of *Anastrepha fraterculus*, production indices and quality control
2. Developing dosimetry tests and evidence of sexual compatibility and competitiveness
3. Building capacity in breeding and production process of the genetic sexing strain of *A. fraterculus*
4. Carrying out quality control tests in the packing and emergency centers and evaluating SIT in the field
5. Developing genetic sexing strain, and evaluating its quality and productivity
6. Provision of equipment for field QC test including field cages.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Improved technical capabilities in the South American region in the use of SIT against the fruit fly *Anastrepha fraterculus*, Wiedemann.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Fund
2022	129 009	—	193 362
2023	165 549	—	2 520
2024	43 050	50 000	2 100
2025	36 750	—	3 150

Project total: 625 490





RLA5088: Advancing Surveillance and Progressive Control of the New World Screwworm Using the Sterile Insect Technique

Objective

To contribute to food security and safety through sustainable reduction of the damage caused by the New World Screwworm (NWS) to livestock production in South America.

Project activities

1. Elaborating a communication strategy for the visibility of the project (web articles, video, social media)
2. Elaborating financial and technical plans guidance for area-wide NWS control programmes
3. Elaborating a comprehensive communication plan for the involvement of stakeholder groups involved or affected by the eradication programme
4. Supporting the establishment of a physical infrastructure.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

National capacities and control of the NWS from selected areas in South America and the Caribbean strengthened using the sterile insect technique resulting in a reduction of financial loss of local farmers.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Fund
2022	219 700	—	1 805 300
2023	124 325	321 300	1 403 150
2024	422 825	250 000	1 403 150
2025	55 650	—	1 403 150

Project total: 7 292 625





RLA5089: Evaluating the Impact of Heavy Metals and Other Pollutants on Soils Contaminated by Anthropogenic Activities and Natural Origin (ARCAL CLXXVII)

Objective

Contribute to the improvement of sustainable management of soils in the LAC region.

Project activities

1. Establishing an inventory of existing regulations and analytical procedures in the region for the evaluation of soil contamination by heavy metals
2. Elaborating a regional harmonized manual of procedures for the evaluation of soil contamination by heavy metals: sampling, analytical methods, and quality assurance
3. Building capacity in sampling and nuclear and related analytical techniques for the evaluation of soil contamination by heavy metals
4. Providing equipment for sampling and soil sample preparation for the completion of laboratories in the region responsible for monitoring and evaluations of soil contamination, and for analysis of heavy metals
5. Building capacity in the evaluation and interpretation of the results obtained.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Increased knowledge of environmental impact of heavy metals and other pollutants on soils for the sustainable soil management in the LAC.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	211 500	140 000
2023	196 250	120 000
2024	173 375	150 000
2025	141 750	145 000

Project total: 1 393 800





INT9186: Sustaining Cradle-to-Grave Control of Radioactive Sources – Phase II

Objective

To strengthen the safe, secure and sustainable cradle to grave management of sealed radioactive sources (SRS), including disused sealed radioactive sources (DSRS), to protect health and the environment.

Project activities

1. To develop a model safety case for predisposal activities of DSRS.
2. To raise awareness of the significance and the requirements for a security plan for DSRS management.
3. To develop a model national strategy for safety and security of SRS.
4. To develop a national strategy for radioactive waste management, including DSRS.
5. To develop transport safety and security plan for SRS.
6. To raise awareness of the existing technologies for SRS management and identify potential gaps.
7. To raise awareness of orphan sources and appropriate recovery strategies.
8. To utilize the tools and technologies for SRS management.
9. To raise awareness of disposal options for DSRS.
10. To establish and maintain national SRS inventories.
11. To raise awareness of centralized storage options for DSRS.
12. To perform high activity source recovery.
13. To develop human resources of participating Member States through e-learning



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Enhanced national, regional and interregional infrastructure for the safe, secure and sustainable cradle-to-grave management of SRS.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	549 250	515 500
2021	492 450	508 150
2022	518 700	500 000
2023	461 475	500 000

Project total: 4 045 525





RAF9069: Strengthening the Implementation of Basic Safety Standards and Radioactive Waste Management — Phase II (AFRA)

Objective

To improve the awareness and application of radiological protection to control public exposure to non-medical human imaging, and to contribute to establishing safe, secure, effective and sustainable radioactive waste management.

Project activities

1. Conducting gap analysis for status of participating Member States in the radiation protection of the public and the environment
2. Enhancing human resource capacity to contribute to national environmental radioactivity surveillance programmes
3. Increasing knowledge about IAEA safety standards for radioactive waste management through training and expert missions
4. Improving institutional capacity waste management facilities and collecting spent sources
5. Building human and institutional capacity in the safety of the management of NORM residues
6. Building human and institutional capacity in waste and DSRS conditioning operations in Member States.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

Awareness of safety requirements for workers and public protection and safety for X ray generators and other types of radiation sources used for inspection purposes and non-medical human imaging improved, and radiation safety (for disused radioactive sources) improved.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	194 775	313 400
2023	468 550	47 250

Project total: 1 023 975





RAS9093: Strengthening Technical Services in Occupational Radiation Protection in Compliance with the International Basic Safety Standards

Objective

To enhance protection of workers occupationally exposed to ionizing radiation in the region of Asia and the Pacific.

Project activities

1. Increasing the understanding of the IAEA GSR Part 3 requirements and to update radiation safety regulations in the participating Member States accordingly
2. Supporting Member States in the establishment/upgrade of national TSP
3. Improving the technical capabilities of service providers including the implementation of Management System
4. Implementing Radiation Protection Programme (RPP) including International/national requirements and to train staff on established RPP.
5. Developing technical capabilities to initiate occupational exposure control programs at NORM facilities and related activities.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Improved national capabilities to provide technical services in occupational radiation protection in compliance with IAEA GSR Part 3 requirements and GSG-7 recommendations.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	238 140	189 250
2023	203 700	84 000
2024	240 450	84 000
2025	176 400	71 400

Project total: 1 287 340





RAS9094: Enhancing Nuclear Emergency Preparedness and Response in the Member States of the Association of Southeast Asian Nations

Objective

To strengthen the ASEAN region’s capabilities for EPR coordination, decision making, and operational interfaces.

Project activities

1. Evaluating and enhancing the existing EPR framework of ASEAN Member States
2. Building capabilities to conduct regional technical assessments of transboundary/transnational emergencies and disseminate harmonized information to all key stakeholders
3. Establishing standards for emergency operations and communications.
4. Establishing response capability of the Point of Contact, Contact for Public Communication, ASEAN Radiological Assessment Centre, and NCA during a nuclear or radiological emergency
5. Enhancing Member States capacity for transition from emergency to recovery phase.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Improved EPR arrangements in the ASEAN MSs, especially in the areas of transboundary/transnational emergency assessment, protective action decision making, and information sharing.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Funds
2022	158 550	63 000	31 500
2023	241 500	133 875	—
2024	247 800	122 325	—
2025	203 700	115 920	—

Project total: 1 327 670





RAS9095: Strengthening Radiation Safety Infrastructure – Phase I (SAPI)

Objective

To strengthen the national radiation safety frameworks, including the establishment of an independent national regulatory authority in the participating Member States and the delivery of adequate radiation protection services, while aiming to promote regional networks on radiation safety related matters.

Project activities

1. Supporting Member States to establish their national regulatory infrastructure for radiation safety
2. Supporting Member States to establish their national radiological protection in occupational exposure.
3. Supporting Member States to establish their national radiological protection in medical exposure.
4. Supporting Member States to establish their national radiological protection in the environment.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

National capabilities to establish national radiation safety infrastructure strengthened.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	84 575	154 595
2023	84 050	192 795
2024	88 775	108 360
2025	100 850	44 625

Project total: 858 625





RAS9096: Strengthening Radiation Safety Infrastructure

Objective

To enhance the radiation safety infrastructure in the region through developing a robust regulatory infrastructure to control radiation facilities and activities, to improve the protection of workers, patients, the public, and the environment, and to enhance the capabilities of MSs to prepare for and respond to radiological or nuclear emergencies.

Project activities

1. Supporting Member States to establish their national regulatory infrastructure for radiation safety in occupational, and medical exposure
2. Supporting Member States to establish their national radiological protection in the environment
3. Enhancing the capabilities in managing EPR arrangements.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Radiation safety infrastructure and EPR capabilities in the region improved.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	440 195	406 875
2023	501 375	422 625
2024	440 000	126 000
2025	572 250	142 000

Project total: 3 052 320





RER9158: Strengthening the Regulatory Infrastructure for Radiation Safety

Objective

Contribute to protecting workers, public and the environment from the hazardous effects of ionising radiation.

Project activities

1. Developing radiation safety regulations and guides developed in line with the IAEA Safety Standards
2. Improving regulatory system for control of existing exposure situations and risk communication
3. Strengthening core regulatory activities
4. Implementing regulatory infrastructure self-assessment by the regulatory bodies
5. Developing competence and capabilities for safety culture within the regulatory bodies, competent authorities and authorized organization.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Europe.

EXPECTED OUTCOME

Strengthened national regulatory infrastructures for radiation safety in planned and existing exposure situations.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	106 995	43 050
2023	206 745	46 536
2024	187 530	32 991
2025	190 575	8 736

Project total: 823 158





RLA9090: Strengthening the Regulatory Infrastructure to Enhance Radiation Safety in Latin America and the Caribbean

Objective

To ensure the safe use of radiation sources, radioactive waste management and transport safety, including the strengthening of emergency preparedness and response capacities, and the adequate education and training in radiation protection, to protect the people and the environment from the hazardous effects of ionizing radiation.

Project activities

1. Building capacity of relevant regulators and operators on safety assessment authorization processes in industrial and medical facilities, cyclotron installations.
2. Facilitating the exchange of experience among share best practices among regulators in the region.
3. Building capacity on drafting regulations, including safety, security and legal.
4. Supporting the development of guidelines for the estimated personnel needed in the regulatory bodies.
5. Building capacity on transport of radioactive materials.
6. Harmonizing procedures for transport safety.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Regulatory infrastructure for radiation safety strengthened to effectively deliver the required regulatory functions, ensure adequate radioactive waste management, enhance emergency preparedness and response capacities, facilitate strategic and professional training, and enhance transport safety.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	1 107 960	454 500
2023	752 535	551 250

Project total: 2 866 245





RLA9091: Strengthening Regional Capabilities for End Users and Technical Support Organizations on Radiation Protection and Emergency preparedness and Response in Line with IAEA Requirements

Objective

To raise the level of compliance with radiation protection requirements with regard to occupational and medical exposure, including calibration capabilities, as well as requirements for emergency preparedness and response.

Project activities

1. Setting up cooperation mechanisms for efficient and effective project implementation.
2. Capacity building in calibration methodology of activimeters used in nuclear medicine, biological dosimetry, occupational safety.
3. Capacity building in SSDLs about brachytherapy, neutron, survey and contamination monitors
4. Strengthening regional capacity for responding to radiological emergencies and the management of radiological accidents.
5. Supporting assistance to international conferences.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Capabilities and networking of end-users, metrology laboratories and technical support organizations on occupational and medical radiation protection as well as on emergency preparedness and response improved and strengthened in line with IAEA Safety Standards.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	850 395	342 000
2023	554 400	368 250

Project total: 2 115 045





INT0099: Maximizing the Socioeconomic Benefit of the SESAME Lightsource

Objective

SESAME provides socio-economic benefit to societies within and beyond the Middle East.

Project activities

1. To provide ancillary devices to improve the utilisation of existing beamlines.
2. To provide optical components, monochromator and beamline source.
3. To enhance remote training and remote access to online learning.
4. To provide travel support to users from non-SESAME Member States.
5. To outreach to recruit new SESAME members to increase its utilisation.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States in Africa, Asia and the Pacific, and Europe.

EXPECTED OUTCOME

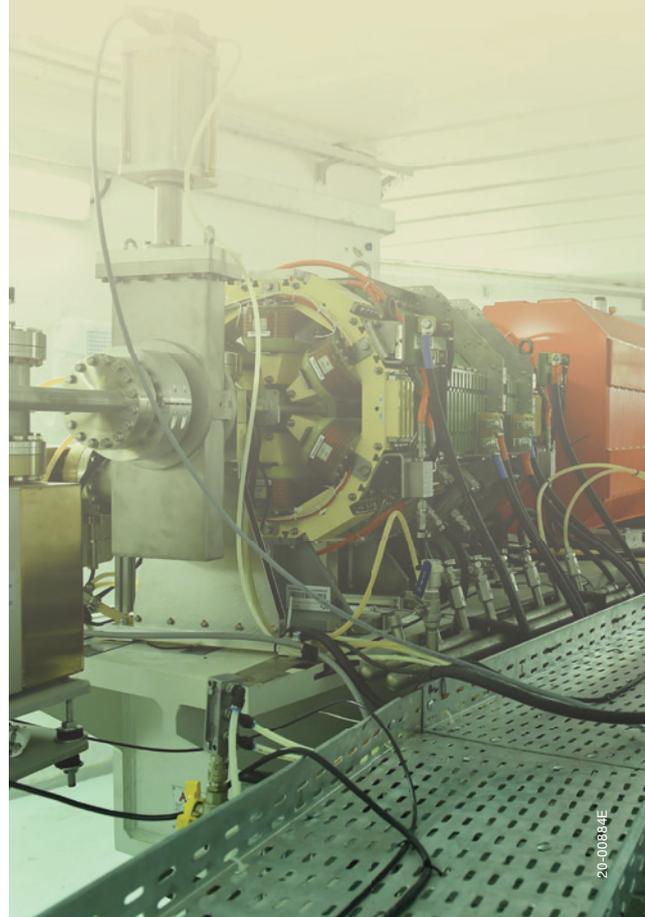
SESAME has a widespread and active user base generating knowledge concerning medical/ pharmaceutical research, environment, advanced materials and the cultural heritage of its Members.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	76 765	465 830
2021	53 290	51 300
2022	80 435	98 550
2023	91 885	105 250

Project total: 1 023 305





RAF0058: Enhancing the Management and Ownership of the Programme (AFRA)

Objective

To enhance regional cooperation among AFRA Member States for using nuclear science and technology for development under good governance and excellence in management.

Project activities

1. Continuous evaluation of the AFRA committees.
2. Conducting technical working group meetings.
3. Supporting high level meetings.
4. Sourcing regional expertise and reviewing project scientific consultants.
5. Monitoring the progress of Regional Designated Centres.
6. Identification of potential partnerships to increase funding for AFRA activities.
7. Providing assistance to facilitate trilateral arrangements between AFRA Member States.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa region.

EXPECTED OUTCOME

Capacity within AFRA states enhanced for the promotion of nuclear science and technology for development.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	248 850	89 250
2021	190 050	196 250
2022	259 350	154 500
2023	204 750	89 250

Project total: 1 432 250





INT0101: Supporting Member States in Human Capacity Building Related to Nuclear Science and Technology and Quality Management of the Technical Cooperation Programme

Objective

To enhance the socioeconomic development of Member States through improved nuclear science and technology and project management capacities.

Project activities

1. Building human capabilities for completing high quality project plans and a sound application of result-oriented TC monitoring and evaluation tools by stakeholders
2. Training opportunities offered by third parties which are relevant to country needs and consistent with the Country Programme Frameworks (CPF), or National Development Plans
3. Qualification of clinical medical physicists in Member States through the master's in medical physics programme (MMP)
4. Participation in relevant international meetings or conferences, usually of thematic networks of specific interest.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States in Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Member States' capacity and networks related to nuclear science and technology and results-based management of TC projects strengthened.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	448 985	1 181 880
2023	915 606	1 254 960
2024	45 360	1 523 235
2025	150 360	1 607 235

Project total:

7 127 621





RAF0061: Establishing and Enhancing National Legal Frameworks (AFRA)

Objective

To assist African Member States in establishing and maintaining adequate national legal frameworks for the safe, secure and peaceful use of nuclear energy and ionizing radiation, in line with the relevant international legal instruments, IAEA safety standards and guidance documents.

Project activities

1. Assisting Member States in Africa with adherence to and implementation of the relevant international legal instruments concluded under IAEA auspices
2. Assessing, revising, and drafting corresponding national legislation
3. Enhancing overall understanding and national capabilities through training in nuclear law
4. Informing and raising awareness of decision makers on the requirements of a national legal framework for the safe, secure, and peaceful uses of nuclear energy and ionizing radiation.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

Member States in the African region with national nuclear legal frameworks established or enhanced in compliance with the international instruments for the safe, secure and peaceful use of nuclear technology.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	182 750	36 750
2023	120 800	—

Project total: 340 300





RAS0088: Supporting Overall Programme Management and Sustainability

Objective

To support national and regional programme review and planning to meet high priority needs of Member States related to enhancing sustainability.

Project activities

1. Enhancing regional strategy for establishing and enhancing partnerships
2. Developing target-oriented outreach material
3. Providing support for planning, monitoring, and coordinating the regional programme in line with TC quality criteria
4. Supporting Member States in updating CPFs
5. Supporting other unforeseen needs of Member States for TC programme management



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific region.

EXPECTED OUTCOME

National and regional programmes in the Asia and Pacific region supported to meet Member States' high priority needs for the use of nuclear technologies for national and regional development, and unforeseen needs of Member States met.

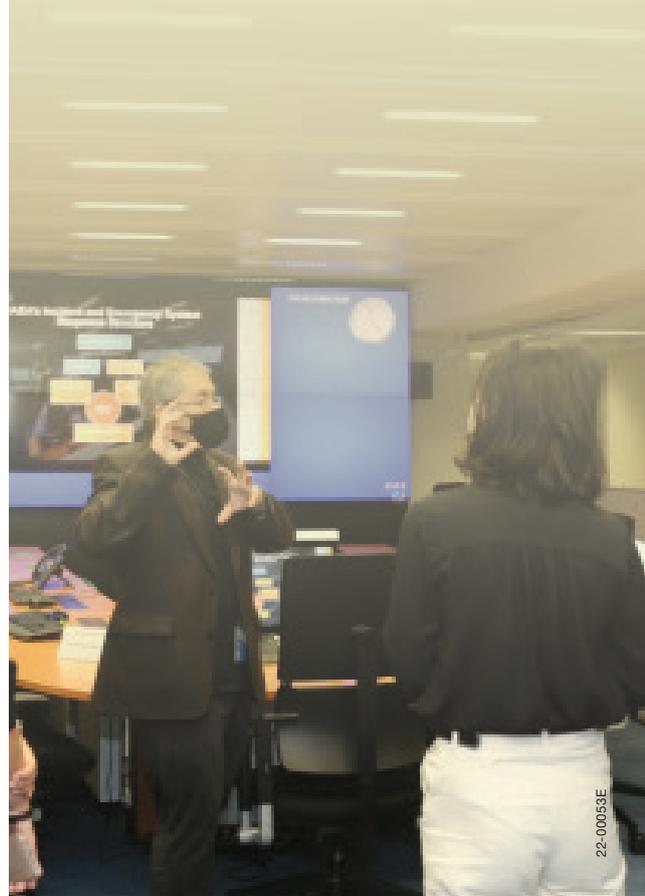
TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	139 610	307 650
2023	219 290	145 550
2024	222 140	96 810
2025	257 900	71 990

Project total:

1 460 940





RAS0089: Developing Human Resources to Support the Utilization of Nuclear Technology for Development Including Emerging Needs

Objective

To upgrade and strengthen the skills and capabilities of human resources within the broad range of peaceful nuclear applications, and to support capacity building efforts in nuclear science and technology in the Asia and Pacific region.

Project activities

Building and enhancing human resources in the following areas:

1. Programme management for the effective use of nuclear technologies to support activities
2. Complementary training on nuclear applications to support or supplement training opportunities offered by third parties, and within IAEA technical competence
3. Outreach and dissemination of results through technical events
4. Support for ensuring the sustainability of completed TC projects
5. Address emergency response situation



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific region.

EXPECTED OUTCOME

Enhanced capability developed enabling to absorb, apply, and benefit from the innovative and emerging nuclear technologies in the Asia and Pacific region, and high priority emergency needs addressed.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	298 665	594 620
2023	457 005	634 620
2024	398 655	643 620
2025	375 230	644 620

Project total:

4 047 035





RAS0090: Establishing and Enhancing National Legal Frameworks

Objective

To assist Member States in Asia and the Pacific region in establishing and maintaining adequate national legal frameworks for the safe, secure, and peaceful use of nuclear energy and ionizing radiation, in line with the relevant international legal instruments, IAEA safety standards, and guidance documents.

Project activities

1. Supporting Member States in drafting, assessing their nuclear legislations
2. Providing training in the field of nuclear law
3. Enhancing Member States capacities in the implementation of the relevant international legal instruments
4. Supporting Member States in establishing action plans for enhancing nuclear legal frameworks.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

National nuclear legal frameworks in Member States in the Asia and Pacific region established or enhanced in compliance with the international instruments for the safe, secure, and peaceful use of nuclear technology.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	267 750	210 000
2023	220 500	157 500

Project total: 855 750





RAS0091: Supporting Nuclear Science and Technology Education at the Secondary and Tertiary Level

Objective

To strengthen and sustain regional cooperation in NST education at the tertiary and secondary levels to ensure the training of the next generation of human resources in harnessing the power of NST.

Project activities

1. Establishing a roadmap for ANENT
2. Setting up communication and information sharing platform
3. Conducting outreach activity to engage teachers, universities, nuclear sectors including training institutes to join the relevant regional network
4. Prepare, review, and standardize nuclear science and technology curriculum
5. Developing resources responding to curriculum
6. Organizing NST competitions including Nuclear Olympiads



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Enhanced cooperation in the area of nuclear education in the region.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	506 150	162 225
2023	569 756	173 250
2024	321 720	136 080
2025	26 250	155 820

Project total:

2 051 251





RER0049: Enhancing the Capacities of Educational Institutions for the Sustainable use of Nuclear Technologies

Objective

To enhance capacity and quality of educational institutions for the sustainable, safe, and secure use of nuclear technologies.

Project activities

1. Evaluating training needs in the nuclear field
2. Conduct a Knowledge Management Assist Visits
3. Assessing, identifying and improving training materials
4. Integrating training materials via the existing learning management system
5. Developing Train-the-Trainers programmes
6. Establishing a methodology for Member States to assess the effectiveness of nuclear education programmes.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Europe.

EXPECTED OUTCOME

Established and strengthened capacities in nuclear education and training programmes.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	323 400	31 500
2023	476 950	—
2024	236 250	—
2025	273 000	—

Project total:

1 341 100





RLA0070: Strengthening Regional Cooperation (ARCAL CLXXXVI)

Objective

To enhance regional cooperation by establishing mechanisms aimed at strengthening technical cooperation among developing countries and the regional programming for Latin America and the Caribbean, through ensuring the quality of the ARCAL programme and promoting communication and partnerships in the region.

Project activities

1. Enhancing the regional strategy for establishing and enhancing partnerships and target-oriented outreach material
2. Promoting regional communication strategy
3. Planning and managing future programmes
4. Strengthening regional WiN ARCAL Chapter.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Impact, visibility and participation in the regional programme for Latin America and the Caribbean enhanced.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Funds
2022	243 600	451 500	1 050
2023	173 250	168 000	2 100
2024	273 000	336 000	1 050
2025	152 250	168 000	2 100

Project total: 1 971 900





RLA0071: Strengthening the Planning, Design and Monitoring of the Programme to Support Human Resource Development and the Implementation of Strategic Activities for Nuclear Technology and Its Applications

Objective

Increase the contribution of nuclear science and technology to the development priorities of Latin America and the Caribbean.

Project activities

1. Strengthening the NLO/NLA and project counterpart capabilities to design, implement, report and manage the TCP
2. Raising awareness on TCP and partnership building
3. Supporting regional strategic initiatives to expand nuclear applications and optimise resources through strengthening of regional centres
4. Establishing capacity to respond adequately to arising emergency situations in their respective country or region
5. Establishing physical protection (PP) system for Brachytherapy Centres.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Capacities strengthened for an effective, efficient and sustainable implementation of the TCP in Latin America and the Caribbean.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Funds
2022	264 075	2 345 825	31 500
2023	329 700	1 178 250	—
2024	381 150	2 424 425	31 500
2025	256 200	1 308 450	—

Project total: 8 551 075





RLA0072: Establishing and Enhancing National Legal Frameworks in Member States

Objective

To assist Member States in Latin America and the Caribbean in establishing and maintaining adequate national legal frameworks for the safe, secure and peaceful use of nuclear energy and ionizing radiation, in line with relevant international legal instruments, IAEA safety standards and guidance documents.

Project activities

1. Assessment, drafting and adoption of nuclear laws
2. Building human capacity in the field of nuclear law
3. Enhancing participation in the relevant international instruments governing their safety, security, safeguards and civil liability
4. Developing country-specific work plans for enhancing national legal framework.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Increased number of Member States in the region with comprehensive and adequate national legal frameworks in place through enhanced competencies and better understanding of the relevant international legal instruments.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	152 775	86 625
2023	97 125	—

Project total: 336 525





INT7020: Developing Capacity towards the Wider Use of Stable Isotopic Techniques for Source Attribution of Greenhouse Gases in the Atmosphere

Objective

To enhance evidence-based decision making in support of SDG 13.2 “Integrate climate change measures into national policies, strategies and planning.”

Project activities

1. Identifying and selecting regional training and service centers.
2. Developing training materials on the use of stable isotope techniques in GHG measurements at three levels and adapting them according to the regional needs and the languages.
3. Providing training in the use of stable isotope techniques in atmospheric observations of greenhouse gases.
4. Analyzing requirements and specific needs by WMO for Quality Assurance.
5. Developing materials on Standard Operating Procedures and Quality Control /Quality Assurance for measurements and calibrations.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States in Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Capacity to perform high quality stable isotope measurements and generate data for emission verification of greenhouse gas (GHG) is established.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	218 650	—
2021	226 840	337 465
2022	100 375	87 465
2023	138 875	87 465

Project total: 1 197 135





RER7013: Evaluating Groundwater Resources and Groundwater-Surface-Water Interactions in the Context of Adapting to Climate Change

Objective

To enhance evidence-based decision making in support of SDG target 6: “By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.”

Project activities

1. Improving technical capacity of participating isotope hydrology institutions.
2. Establishing monitoring network.
3. Sampling, sample analyses and development of analytical reports.
4. Developing comprehensive analyses on hydrology infrastructure.
5. Implementing IWAVE in selected Member States.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Europe region.

EXPECTED OUTCOME

Enhanced scientific basis for evidence-based decision-making in integrated water management, provided by improved characterization, and monitoring of groundwater resources.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	224 950	10 000
2021	224 230	500 000
2022	151 450	141 750
2023	245 950	141 750

Project total: 1 654 080



RAF7020: Establishing Regional Capacities to Assess the Importance of Carbon Sequestration in Aquatic Systems for Climate Change Mitigation, Environmental Conservation and Economic Purposes (AFRA)

Objective

To strengthen regional capacities for using nuclear and isotopic techniques to apply standardized methodologies for carbon accounting in aquatic ecosystems.

Project activities

1. Strengthening human and institutional capacities of Member States in the measurement and use of radiotracers and isotopes through training and equipment provision
2. Raising awareness among decision makers in Member States of the importance of carbon sequestration in aquatic ecosystems
3. Harmonizing sediment sampling procedures and relevant analytical techniques and methodologies.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

Capacities of Member States for applying nuclear and isotopic tools strengthened, allowing to assess carbon stocks and sequestration rates.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	282 350	—
2023	255 010	—
2024	305 360	240 000
2025	336 280	—

Project total: 1 419 000





RAF7021: Enhancing, Planning, Management and Sustainable Utilization of Water Resources (AFRA)

Objective

To enable Member States to enhance the quantity and quality of available water, including groundwater.

Project activities

1. Gap analysis review for the participating countries capacities in the assessment of ground water resources
2. Developing plan for building the capacities of Member States
3. Building a regional network of existing laboratories to promote regional self-reliance
4. Building regional capacities in nitrogen isotopes for water quality studies.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

Enhanced evidence-based decision making for the characterization, management and monitoring of groundwater resources, including transboundary systems.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	759 450	648 450
2023	993 250	448 450
2024	913 250	448 450
2025	810 830	386 080

Project total: 5 408 210





RAS7038: Monitoring the Marine Environment for Enhanced Understanding of the Abundance and Impact of Marine Plastic Pollution

Objective

To enhance regional understanding of the abundance and impact of marine plastic pollution.

Project activities

1. Establishing national interinstitutional coordination mechanisms for sustainable marine management of marine plastic pollution
2. Establishing a regional network for monitoring and impact assessment of marine plastic pollution
3. Supporting laboratories with adequate equipment and trained staff, and appropriate protocols adopted
4. Building capacity in the sources, distribution, and trends of nanoplastics and microplastics from nuclear and advanced techniques.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

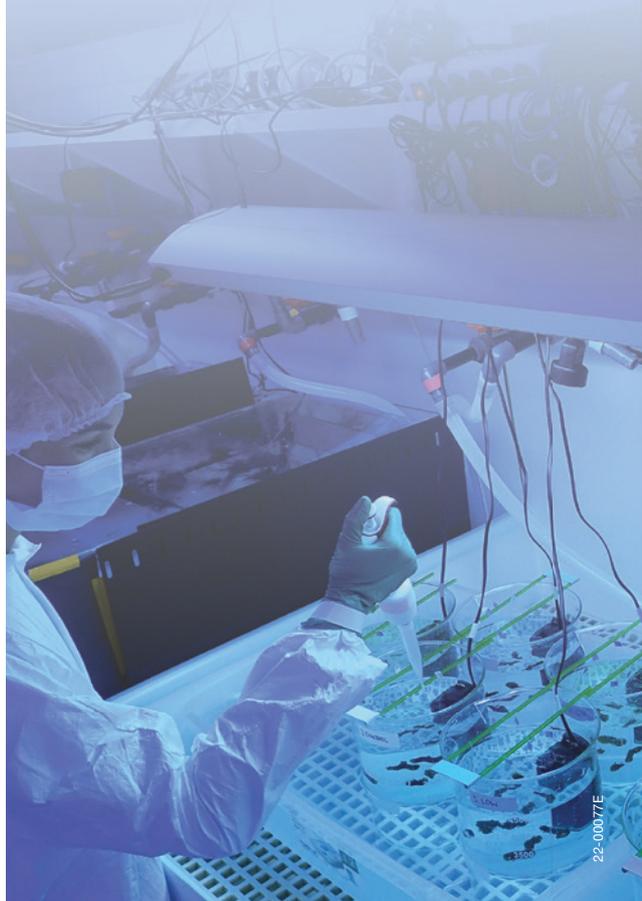
Plastic management improved in the Asia and Pacific region through the establishment of downstream baseline surveys, and the status and trends of marine plastic pollution impacts.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	225 550	615 500
2023	236 400	442 470
2024	221 600	458 800
2025	209 250	199 500

Project total: 2 609 070





RAS7039: Enhancing the Protection of Marine, Terrestrial, and Coastal Environments through Holistic Environmental Monitoring Programmes (ARASIA)

Objective

To enhance informed decision making for the protection of marine, terrestrial, and coastal environments through regional holistic environmental monitoring programmes.

Project activities

1. Strengthening human and institutional capacities on marine radioactivity assessment
2. Strengthening capabilities for terrestrial environmental radioactivity monitoring and assessments
3. Establishing database on environment radioactivity
4. Building capacity in the assessment of air pollution, including radioactive particles.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Regional capabilities for the protection of marine, terrestrial, and coastal environments improved.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Funds
2022	413 675	780 000	2 504 200
2023	259 960	—	500 000
2024	36 750	—	—
2025	88 200	—	—

Project total: 4 582 755





RAS7041: Developing an Effective and Sustainable Implementation of Integrated Management of Water Resources and Related Ecosystems (SAPI)

Objective

To strengthen the national and subregional capabilities of the Pacific Islands' Member States for the systematic assessment and resolution of their water resource and coastal zone management issues in a manner that ensures access to clean water and management of these resources in a sustainable fashion.

Project activities

1. Improving technical capacity of participating institutions in isotope hydrology and related techniques
2. Establishing monitoring/intervention capabilities and implementing regular verification and reporting
3. Establishing monitoring networks and acquiring new hydrological information



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Enhanced national capacities for the utilization of isotopic techniques and relevant complementary methods to assess water resources in support of integrated water resource and coastal zone management.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	96 545	194 205
2023	100 470	121 450
2024	108 628	123 060
2025	106 125	106 890

Project total: 957 373





RLA7026: Evaluating Organic and Inorganic Environmental Pollution in Aquatic Environments and Their Impact on the Risk of Cyanotoxin-Producing Cyanobacteria

Objective

Strengthened the governance and sustainable management in rivers, lakes, and reservoirs of Latin America and the Caribbean (LAC).

Project activities

1. Harmonized sampling and analysis techniques for water quality and trophic state assessment, with an approach in CyanoHABs.
2. Strengthening the human and technological resources to establish appropriate environmental assessments and monitoring programs, with an approach in CyanoHABs in water bodies of LAC.
3. Establishing regional capacities for the use of nuclear techniques in the analysis of saxitoxins produced by cyanobacteria and isotopic characterization of contaminants in water bodies of LAC



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

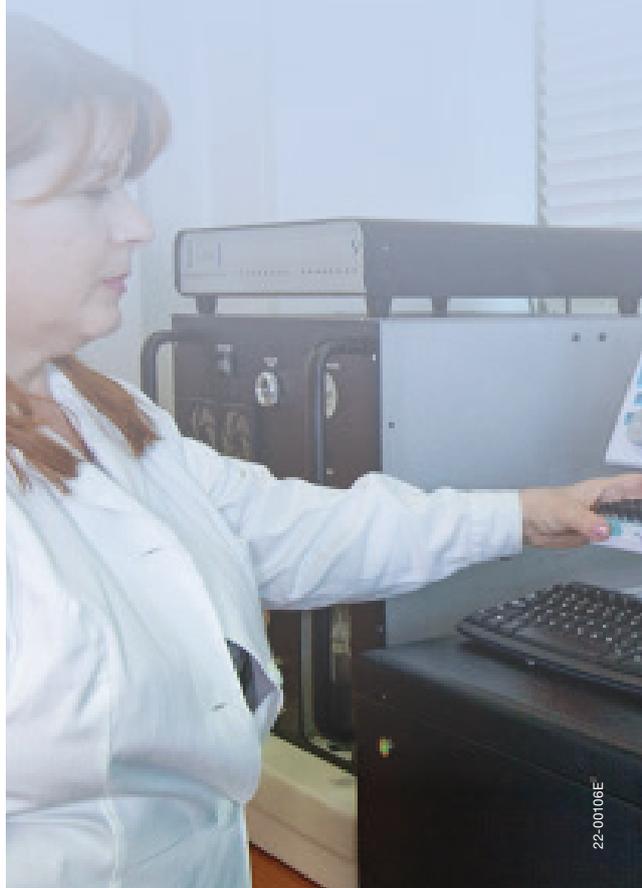
Improved knowledge on water quality and trophic state in aquatic ecosystems in LAC.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	251 450	380 000
2023	200 415	260 000
2024	240 510	—
2025	211 350	—

Project total: 1 543 725





RAS1030: Using Radioisotope Techniques and Computational Fluid Dynamics Simulation for Troubleshooting and Optimizing of Industrial Processes

Objective

To integrate RTM with CFD for industrial process applications.

Project activities

1. Building human capacity through conducting radiotracer certification programme
2. Conducting a case study on hybrid activities in industrial applications.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Asia and the Pacific.

EXPECTED OUTCOME

Enhanced competencies for optimized application of RTM in industries in complement with CFD simulation through advanced technology and standardized RTM implementation.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	121 400	125 000
2023	163 650	33 000
2024	302 400	36 000
2025	272 250	147 000

Project total: 1 200 700





RLA1020: Promoting Radiation Technology in Natural and Synthetic Polymers for the Development of New Products, with Emphasis on Waste Recovery (ARCAL CLXXIX)

Objective

To contribute to the reduction of the environmental impact of natural and synthetic polymer wastes using irradiation techniques.

Project activities

1. Building capacity in modification of natural and synthetic polymers waste with radiation for products and advance material development
2. Establishing pilot scale simulated recycling process, through capacity building
3. Transferring the know-how of the design, implementation and operation of a recycling plant to the countries of the region.

DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Demonstrated the feasibility of radiation technology for the modification of different polymer wastes at a pilot scale.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Funds
2022	203 385	2 660 000	5 250
2023	202 650	2 101 850	43 050
2024	78 750	96 600	—
2025	68 250	—	—

Project total: 5 459 785





RLA1021: Strengthening Capacities and Promoting New Trends Related to Irradiation Technologies for Quarantine Purposes (ARCAL CLXXXI)

Objective

To strengthen the competitiveness of agro-industrial regional economies, minimize the environmental impact and improve the quality of life of the population.

Project activities

1. Developing a technical-economic feasibility study in the region on irradiation facilities
2. Strengthening links between technical sector, decision makers and the private sector
3. Strengthening regulatory and normative field and implementation system
4. Developing a guide for users of practical recommendations for the use of irradiation technology as a quarantine treatment.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Feasibility and cost effectiveness of irradiation technologies for quarantine purposes demonstrated.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Funds
2022	156 450	42 000	52 500
2023	79 800	159 075	—

Project total: 489 525





RLA1022: Improving the Satisfaction of Regional Demand for Products and Services of Nuclear Research Reactors (ARCAL CLXXX)

Objective

To increase the accessibility of users to nuclear applications in the various socioeconomic sectors of the region.

Project activities

1. Consolidating a regional network of countries with and without Research Reactors
2. Approving the agreed methodology and work plan of the regional network
3. Transferring new technologies from research reactors within the region.



DURATION

Two years

BENEFICIARY COUNTRIES

Member States from Latin America and the Caribbean.

EXPECTED OUTCOME

Satisfaction for regional demand for HR products and services improved.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a	Non-Agency Funds
2022	157 500	52 500	19 950
2023	111 825	178 500	105 250

Project total: 625 525





Energy

INT2020: Enhancing Capacity Building to Promote Successful Decommissioning and Environmental Remediation (D&ER) Projects

Objective

To enhance MSs' preparedness for the implementation of decommissioning and environmental remediation of projects in a safe, sustainable, timely and cost-effective way.

Project activities

1. To develop national frameworks to enable implementation of the D&ER.
2. To create and maintain capacity through staff training and associated mechanisms.
3. To establish and update the regulatory requirements for decommissioning and remediation.
4. To build the human resources for regulatory oversight of decommissioning and remediation.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States in Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

Enhanced MSs' preparedness for the implementation of decommissioning and environmental remediation of projects in a safe, sustainable, timely and cost-effective way.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

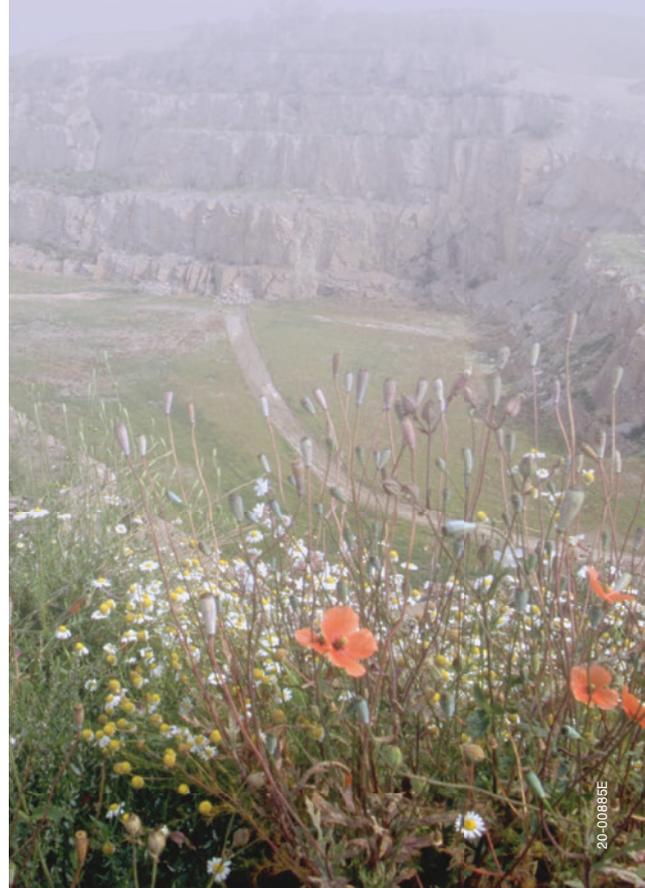
Year	Funded	Unfunded
2020	199 500	220 500
2021	220 500	283 500
2022	210 000	289 800
2023	283 500	73 500

Project total: 1 780 800



Technical Cooperation Programme

For more information, please refer to the document "Technical Cooperation: The Agency's Proposed programme for 2020-2021" as produced in GOV/2019/47 and its attachments.





Energy

INT2021: Supporting Member States Considering or Planning to Introduce or Expand Nuclear Power Programmes in Developing the Sustainable National Infrastructure Required for a Safe, Secure and Peaceful Nuclear Power Programme

Objective

To support participating Member States in creating an enabling environment to facilitate the safe, secure and sustainable introduction or expansion of nuclear power.

Project activities

1. To provide the needed training and capacity building for an informed decision on the introduction or expansion of nuclear power, including on the licensing process for nuclear power plants, qualification programmes, and energy planning.
2. To support participating Member States in their preparation of the entire national infrastructure for building nuclear power plant.
3. To develop the capabilities of the participating Member States to regulate and operate a nuclear power plant safely, securely and cost sustainably and to manage the resulting radioactive waste.



Technical Cooperation Programme

For more information, please refer to the document "Technical Cooperation: The Agency's Proposed programme for 2020-2021" as produced in GOV/2019/47 and its attachments.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

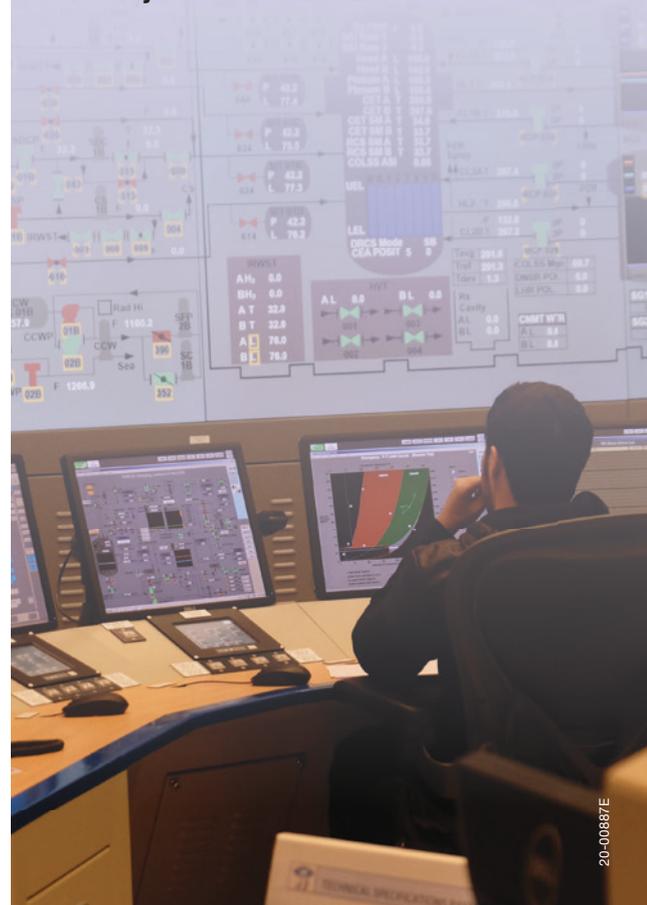
Existing and new nuclear programmes in participating Member States are enhanced in terms of safety, security and sustainability following the IAEA Milestones approach to developing a national infrastructure for nuclear power.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	121 590	1 947 330
2021	11 340	2 147 355
2022	121 590	1 823 850
2023	11 340	2 023 875

Project total: 8 208 270





Energy

INT2022: Supporting Capacity Building in Member States for Uranium Production and Safety of Naturally Occurring Radioactive Material Residue Management

Objective

To incorporate good practices for the sustainable development of Uranium production cycle (UPC) projects and NORM residue management, providing the support to MSs in the application of relevant IAEA safety standards as well as good regulatory oversight.

Project activities

Capacity building for the participating countries in the following areas:

1. Milestones and regulatory framework for UPC and other NORM activities.
2. Stakeholders involvement in the life management of uranium production cycle.
3. Emerging technologies for uranium exploration and resource assessment.
4. Worker protection and environmental management in mineral exploration.
5. Decision making and execution of uranium production projects.
6. Technical feasibility, socio-environmental aspects and regulatory framework of the uranium production cycle.
7. Uranium production by in-site recovery (ISR) mining.
8. Uranium production focus on conventional mining – milling methods.
9. NORM residues management.
10. Authorization and facility decommissioning related to NORM activities.



Technical
Cooperation
Programme

For more information, please refer to the document “Technical Cooperation: The Agency’s Proposed programme for 2020-2021” as produced in GOV/2019/47 and its attachments.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean.

EXPECTED OUTCOME

To improve the sustainability and safety aspects of UPC, as the front end of the nuclear fuel cycle, and management of NORM in line with IAEA safety standards and good practices.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	Funded	Unfunded
2020	136 500	168 000
2021	117 075	184 275
2022	151 200	161 700
2023	128 625	168 000

Project total: 1 215 375





Energy

INT2023: Supporting Member States' Capacity Building on Small Modular Reactors and Micro-reactors and their Technology and Applications as a Contribution of Nuclear Power to the Mitigation of Climate Change

Objective

To raise awareness and to improve knowledge, capacity building and safety review capability in developing countries as far as all the fundamental aspects of SMRs and MRs deployment and their electric and non-electric applications are concerned, mitigating climate changes and integrating the basic principles of circular economy. Special emphasis is on siting, design, construction, commissioning, operation, maintenance, human resource management and management system considerations, technology and safety assessment, engineering, fuel cycle, waste management, decommissioning, economics and financing, safety and regulation.

Project activities

1. Building human capacity in Member States on developing and/or introducing SMR/MR technology and relevant applications
2. Developing capabilities to assess safety of designs, regulate and operate SMRs and MRs safely, securely and cost sustainably.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States in Africa, Asia and the Pacific, Europe and Latin America and the Caribbean.

EXPECTED OUTCOME

Awareness raised on SMR/MR technologies and their applications to enhance nuclear energy contribution and socioeconomic development in Member States.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	554 400	330 225
2023	223 650	548 100
2024	170 625	226 800
2025	105 000	126 000

Project total: 2 284 800



Technical Cooperation Programme





Energy

RAF2013: Developing, Expanding, and Reinforcing Energy Planning Capabilities – Phase II (AFRA)

Objective

To support the development of energy planning capabilities and expand skills by supporting the development of sub-regional energy plans.

Project activities

1. Developing human and institutional capacities in Member States to identify strategic and promising activities, and ensure the safe operation of RRs and related installations;
2. Enhancing Member States capabilities in comparison programmes for each application, and ensuring quality assurance programmes are in place;
3. Supporting Member States to intensify exchanges of experiences in different advantages of research reactors.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Africa.

EXPECTED OUTCOME

Energy planning capabilities and partnerships in the region expanded.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	437 955	176 400
2023	455 700	—
2024	244 335	456 750
2025	231 000	178 500

Project total: 2 180 640



Technical
Cooperation
Programme





Energy

RER2018: Analyzing Low Carbon Pathways towards an Ambitious Decarbonized Energy Sector by 2050

Objective

To assist Member States in achieving the Paris Agreement target and aid in the preparation of their National Energy and Climate Plans (NECP) and Nationally Determined Contributions (NDC).

Project activities

1. Strengthening the capacities of Member States to evaluate and assess energy technologies and their potential contribution to climate change mitigation to support countries in defining their commitments under the Paris Agreement
2. Enhancing Member States expertise on the role of nuclear power as part of low carbon energy pathways
3. Providing national support to pre-selected Member States on energy planning in support of developing NECPs/NDCs.



DURATION

Four years

BENEFICIARY COUNTRIES

Member States from Europe.

EXPECTED OUTCOME

Strengthened institutional capacities to develop national energy and climate plans and strategies.

TOTAL ESTIMATED BUDGET

Budget (EUR) with 7% PSC NOT included

Year	TCF	Footnote-a
2022	225 120	249 900
2023	216 510	367 080
2024	188 055	249 900
2025	279 510	249 900

Project total: 2 025 975



Technical Cooperation Programme

