

Chapter : 2003 Jordan Atomic Energy Commission

Creation : Jordan Atomic Energy Commission was established early in 2008 as a legal successor for Jordan Nuclear Energy Commission pursuant to Nuclear Energy Law No. (42) of 2007 to implement the National Nuclear Energy Strategy, in order to transfer, promote develop and management uses of the peaceful nuclear energy and radiation technology to the Kingdom, in addition to establishing investment projects to service the Jordanian economy in those areas, and their use in electricity generation or desalination and in fields of agricultural, industrial, medical and other nuclear applications.

Vision : Pioneering in nuclear technology deepening and expanding its applications and holding nuclear and radiation projects in the Kingdom in a peaceful, safe and sustainable way.

Mission : Creating and developing a catalytic technological, scientific and investment environment for nuclear projects to enhance energy security and contribute to Jordan's economic and social development.

Legal Framework : Atomic Energy Law No.(42) for the year 2007 and amendments thereto.

Priorities and targeted results within the determined ceilings for the years 2025 - 2027 :

First Priority :

- Developing the infrastructure and services of the Commission in accordance with domestic and international standards and introducing peaceful uses of nuclear energy in the fields of water and energy.

Key procedures to achieve the first priority :

- Preparing specialized studies and researches on the economic feasibility of nuclear energy uses in the areas of desalination, water pumping and electricity generation, and concluding agreements and memorandums of understanding with the relevant authorities (locally and abroad).
- Conducting specialized workshops on peaceful uses of nuclear energy and working to increase local awareness-raising campaigns to promote societal acceptance of the multiple uses of nuclear energy.
- Raising the quality of services provided by applying the highest standards of quality and performance in line with national standards (King Abdullah II Award for Excellence, National Cyber Security Center).
- Strengthening the national nuclear security and safety system, safeguards and non-proliferation system, as well as strengthening the national and Arab system in radiation prevention and response to radiological and nuclear emergencies.
- Marketing and increasing the number of beneficiaries of the Commission's scientific services in all areas.
- Supporting scientific research and innovation and providing a stimulating environment that supports creativity and excellence.
- Work to increase the efficiency of individual and institutional performance and develop and improve employees' capabilities.

First Priority Outcomes :

- Incorporating the nuclear option into national plans in the areas of desalination, water pumping and electricity generation.
- Increasing the number of beneficiaries of Commission's services.
- Conducting numerous studies, specialized research and economic feasibility studies of the uses of nuclear energy in the fields of water and energy in Jordan.
- Promoting societal acceptance of Jordan's peaceful nuclear energy uses at the formal and public levels.
- Raising the efficiency of individual and institutional performance and developing workers' abilities.

First priority-related program :

- Administration and Support Services

Second Priority :

- Sustaining the operation of Jordan's nuclear reactor for research and training while expanding the delivery of its local and regional services within the optimal use of its applications.

Key procedures to achieve the second priority :

- Ensuring the application of the highest standards of nuclear safety and security, which have been adopted in the design and operation of the reactor.
- Promoting reactor applications by introducing new technologies (neutron stitching technology for industrial purposes and neutron beam applications for neutron imaging and material science research).
- Updating the reactor's business plans and procedures to cover all activities and ensuring that all periodic checks and measurements relating to the safe operation of the reactor are carried out.
- Expanding the production of certified medical and industrial isotopes according to national and international specifications and standards.
- Including applying technical inspection to all pharmaceutical and industrial radioactive products of isotopes and their conformity with locally and globally approved standards and specifications.
- Production of radioactive iridium isotope used for industrial imaging purposes and ensuring that it meets the requirements of ISO 9978 and 2919.

Second Priority Outcomes :

- Introduction of new technologies (neutron stitching technology to produce high-quality semiconductors and neutron beam applications for neutron imaging and material science research).
- Adopting the reactor's business plans and procedures to cover all activities and ensuring that all periodic checks and measurements relating to the safe operation of the reactor are carried out.
- Production of other medical and industrial isotopes certified according to national and international standards.

Second priority-related program :

- Nuclear research/former nuclear reactors.

Third Priority :

- Expanding the exploration and exploitation of nuclear materials in Jordan, most notably uranium, through the Jordan Uranium Mining Company.

Key procedures to achieve the third priority :

- Completion of the technical and economic studies required to complete the detailed economic feasibility study of the uranium project in the central Jordan region.
- Studies of the extraction of uranium-accompanying elements and uranium production from industrial groupings of phosphoric acid.
- Studying environmental impact assessment.
- Completing the supply of automated analysis laboratories, mining studies laboratory with advanced devices and equipment.
- Engaging employees in internal and external training courses to raise the productivity rate and develop the company's scientific competence.
- Continued cooperation with the International Atomic Energy Agency (IAEA) through the technical cooperation programme to build the technical capacity of human resources and procure the necessary equipment and equipment for the project in partnership with the Agency.
- Increasing the number of trainees from outside the company to provide the labour market with trained industrial expertise.
- Providing technical and logistical services in exploration for other mining projects in the Kingdom.
- Cooperation with government institutions, universities, scientific centres and the private sector.

Third Priority Outcomes :

- Detailed economic feasibility study of the uranium project in the central Jordan region (2025-2027).
- Expansion of uranium exploration for promising areas in the Kingdom.
- Producing additional quantities of yellow cake by raising the production capacity of the pilot factory.
- Technical studies of uranium-accompanying elements in the central Jordan region.
- Technical studies on the production of uranium from the industrial groupings of phosphoric acid in the Kingdom.
- Environmental impact assessment study of the project.
- Providing the company with advanced hardware and equipment.
- Increasing the number of agreements with government institutions and scientific centres in addition to private sector companies.
- Trained technical competencies in uranium exploration and mining.

Third priority-related program :

- Administration and Support Services

Tasks of the Ministry / Department :

- Conducting and supporting research and studies in the theoretical and applied fields of energy, nuclear science and radiation technology, documenting and disseminating information and providing scientific and technical advice.
- Establishment, development and placement of scientific research facilities and laboratories for radiation technology and nuclear materials in the service of institutions, scientists and researchers.
- Developing technical bases for the extraction of domestic nuclear materials such as uranium, thorium, zirconium and plutonium elements, heavy water manufacturing, and establishing installations and facilities for the individual extraction and mining of these elements or in partnership with the public or private sectors.
- Treatment and manufacture of nuclear material at all stages of the nuclear fuel cycle and its management.
- Processing, disposal and management of radioactive wastes.
- Establishment of investment projects, including the establishment and management of companies in the field of nuclear energy applications such as power plants, desalination of water, the establishment of nuclear reactors and accelerators for various peaceful purposes and radiation technology on a commercial basis individually or jointly with the public or private sectors.
- Liaising with institutions and bodies involved in nuclear and radiological science and technology in Arab and foreign States to benefit from scientific expertise, research and aid in the development and implementation of peaceful uses of nuclear energy and radiation technology.
- Following up on global developments in the field of power generation using fissile and merger nuclear sources and cooperation with relevant Arab, regional and international organizations and bodies.
- Participation in Arab, regional and international nuclear energy projects, whether related to expertise, production or research, with the approval of the Council of Ministers.
- Regulating the relationship between Jordanian agencies and institutions concerned with science, technology, nuclear applications and ionizing radiation and between them and relevant international, regional and Arab organizations and bodies.
- Inventory and control of all nuclear material subject to comprehensive safeguards that are included in the Commission's projects.

Ministry/Department Contribution to the Achievement of the National Objectives :

- Jordan's development as a center for industries in the region by supplying fast-growing exports with premium and high-value products (high-value industries).
- Improving the use and sustainability of Jordan's natural resources to launch inclusive sectoral growth and improve the quality of life (sustainable resources).

Major Issues and Challenges which face the Ministry / Department :

- Lack of sufficient financial resources necessary for implementing the Jordanian nuclear program.
- Braindrain of qualified Jordanian competencies in the nuclear field to work in the nuclear projects outside Jordan.
- Poor societal awareness of the importance and benefits of Jordan's nuclear program and its implications for the Jordanian economy.
- The negative geopolitical impact of some countries on the development of Jordan's nuclear program for peaceful use in Jordan.
- Bureaucracy in administrative and financial procedures and its depletion of time, effort and delay of work.

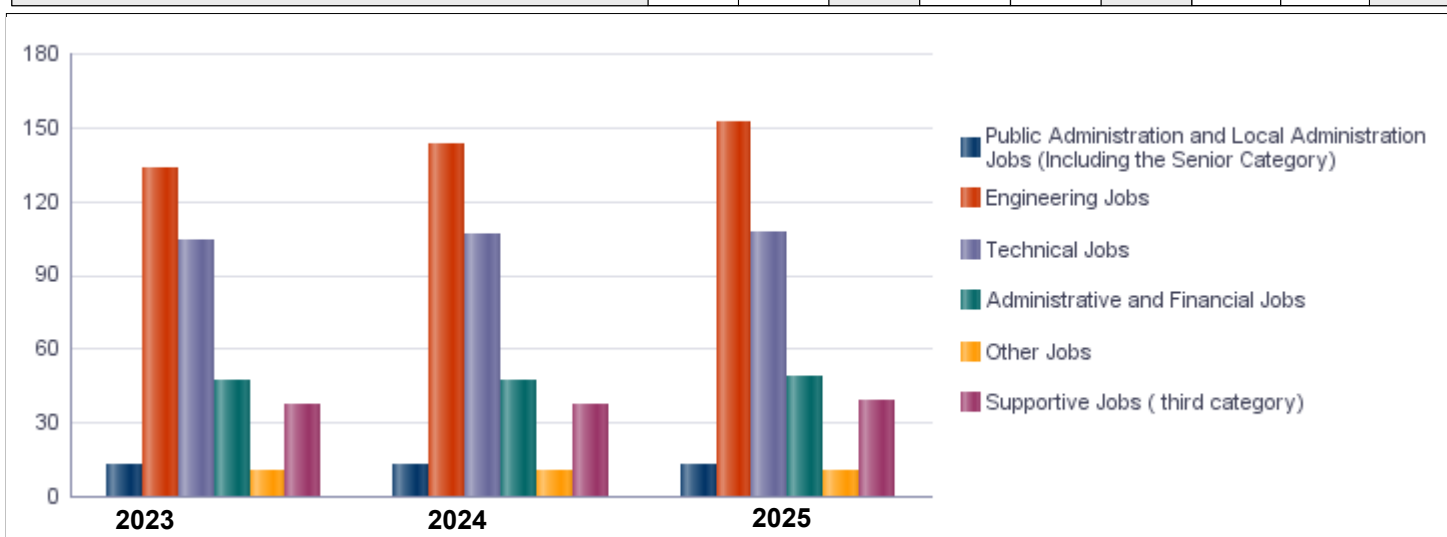
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Strategic goals of the Ministry/ Department/ Unit and Performance Measurement Indicators

Strategic Objective	Performance Indicator	Base year	Value	Actual Value	Target Value	Preliminary Self Evaluation	Target Value		
				2023	2024	2024	2025	2026	2027
1 - Promotion of peaceful uses of atomic energy in water and energy	1 Number of conventions and memorandums of understanding (cumulative).	2023	19	19	21	20	22	23	25
	2 Number of visits and awareness leaflets for all community groups	2023	49	49	22	23	30	35	40
2 - Infrastructure development, institutional development, quality of services and expansion of its field in accordance with local and international standards.	1 Number of beneficiaries of the Commission's services.	2022	300	344	350	340	350	400	450
	2 Percentage of governance standards application.	2019	20%	30%	55%	50%	70%	90%	100%
	3 Percentage of services automation (cumulative).	2025	-	-	-	-	40%	80%	100%
3 - Sustaining the operation of Jordan's nuclear reactor for research and training, ensuring optimal use of its applications and expanding the production of radioisotopes to cover the needs of the local and regional market	1 Number of radioisotopes produced.	2023	4	4	5	4	5	6	6
	2 Number of studies and research.	2023	4	4	10	18	11	12	13
4 - Expansion of the exploration and exploitation of nuclear materials in Jordan, most notably uranium.	1 Uranium quantities and accompanying elements in the Central Jordan project	2013	15%	80%	80%	80%	85%	90%	90%
	2 Area Surveyed in the Kingdom.	2013	20%	30%	30%	30%	35%	40%	40%
	3 Environmental Impact Assessment Study of the Central Jordan Project.	2023	10%	10%	20%	15%	30%	70%	80%
5 - Supporting scientific research, innovation, creativity and excellence.	1 Number of researchers.	2023	38	38	40	38	45	50	50
6 - Strengthening the cooperation system within the framework of domestic and international institutions and the private sector.	1 Number of technical cooperation projects implemented at the national level and bilateral cooperation agreements.	2023	25	25	30	39	39	40	41
7 - Developing Jordan's capabilities and human resources to implement Jordan's nuclear program.	1 Number of posts for which the functional skills framework has been prepared.	2025	-	-	-	-	30	50	70
	2 Number of staff participating in technical conferences and meetings.	2020	85	198	150	174	150	155	160

Number of Staff in the Ministry/ Department/ Unit

Group	Job	2023			2024			Preliminary 2025		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Public Administration and Local Administration Jobs (Including the Senior Category)	Supervisory and Leadership	10	3	13	10	3	13	10	3	13
Engineering Jobs	Engineer	108	25	133	118	25	143	127	25	152
Technical Jobs	Technical Jobs	83	21	104	85	21	106	86	21	107
Administrative and Financial Jobs	Financial Administration Jobs	29	18	47	29	18	47	30	19	49
Other Jobs	Other jobs	8	3	11	8	3	11	8	3	11
Supportive Jobs (third category)	Support Employee (Driver,	35	2	37	35	2	37	36	3	39
Total		273	72	345	285	72	357	297	74	371
Total Cost of Salaries		3551604	895813	4447417	3929886	991114	4921000	4343513	1097487	5441000



Most notable information about the Ministry/Department/Unit

No.	Description	2021	2022	2023	2024	2025
1	Number of companies/ institutions specialized in nuclear and radiology technology and energy dealing with the Commission.	3	3	3	3	3
2	Number of companies/institutions benefiting from radiant wastes storage and transport services provided by the Commission.	25	26	27	27	28
3	Number of companies benefiting from gamma ray sterilization provided by the Commission.	30	31	31	31	32
4	Number of Jordanian universities benefiting from the technical facilities of the Commission including scientific researches.	13	13	13	13	14
5	Number of institutions / companies benefiting from lab testing to discover radiology pollutants and measurements services and radiology calibration in the Commission and measure personal radiology dose.	125	126	128	128	129
6	Number of institutions/ hospitals / medical centers using medical radioisotopes produced by the Jordanian nuclear reactor for training and researches.	12	12	12	12	13

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(In JDs)

Current Activities Appropriations According to Program							
Prog.	Activites		Actual	Estimated	Re-estimated	Estimated	Indicative
			2023	2024	2024	2025	2026
6181	601	Administrative and Support Services	4048414	4386000	4351000	4433000	4439000
		Total of Program	4048414	4386000	4351000	4433000	4439000
6184	601	Nuclear researches	2351717	2734000	2724000	3236000	3275000
		Total of Program	2351717	2734000	2724000	3236000	3275000
		Total	6400131	7120000	7075000	7669000	7714000

Capital Projects Appropriations According to Program							
Prog.	Projects		Actual	Estimated	Re-estimated	Estimated	Indicative
			2023	2024	2024	2025	2026
6181	001	Administration and Support Services Program	359821	355000	315000	375000	375000
		Administration Project					
	002	Supporting energy projects.	2148172	1780000	1780000	2230000	2580000
		Total of Program	2507993	2135000	2095000	2605000	2955000
6184	003	Establishing and operating the research nuclear reactor	1389232	3715000	3255000	3570000	3520000
		Total of Program	1389232	3715000	3255000	3570000	3520000
		Total	3897225	5850000	5350000	6175000	6475000

Overall Summary of Expenditures for Chapter 2003- Jordan Atomic Energy Commission for the Years 2023 - 2027

(In JDs)

Description	Actual	Estimated	Re-estimated	Estimated	Difference between estimated 2025 and re- estimated 2024	Indicative	
	2023	2024	2024	2025		2026	2027
Current Expenditure	6,400,131	7,120,000	7,075,000	7,669,000	594,000	7,714,000	7,792,000
Capital Expenditure	3,897,225	5,850,000	5,350,000	6,175,000	825,000	6,475,000	6,575,000
Total current and capital expenditure	10,297,356	12,970,000	12,425,000	13,844,000	1,419,000	14,189,000	14,367,000

Most notable differences between estimated appropriations for 2025 and re-estimated for 2024

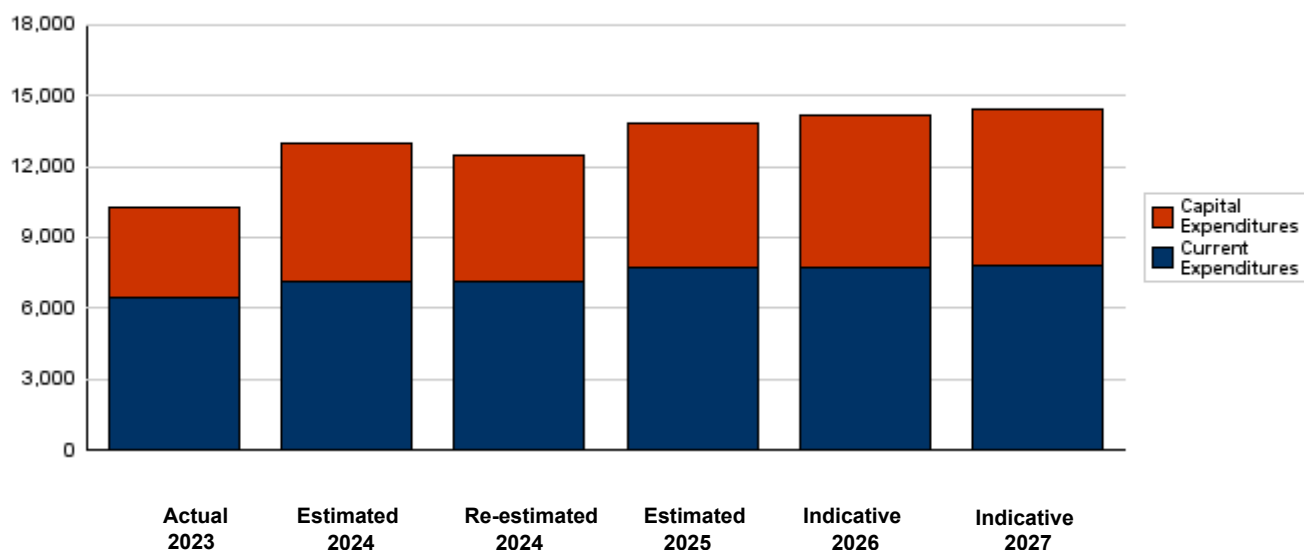
Current expenditure :

- Increased compensations of employees group in the amount of (545) thousand JDs. This increase was the result of the natural increase in salaries as well as vacancies and new jobs to be recruited in 2025.
- Operational expenditures appropriations increased by (49) thousand JDs, this increase was the result of higher electricity, water, fees and licenses items.

Capital expenditure :

- Capital expenditures increased by approximately (825) thousand JDs. This increase was the result of a high allocation of the project to support energy projects by (450) thousand JDs and a project to establish and operate a research nuclear reactor by (315) thousand JDs and a project to manage the Administration and Support Services program By (60) thousand JDs.

(Thousands of JDs) Graph of the current and capital expenditures for the years 2023 - 2027



Overall Summary of Current Expenditures for the Years 2023 - 2027

Chapter : 2003 Jordan Atomic Energy Commission

(In JDs)

Group	Item	Description	Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026	Indicative 2027
21		Compensations of Employees						
2111		Salaries, Wages and Allowances						
	102	Unclassified Employees	264751	261000	261000	264000	268000	272000
	103	Comprehensive Contract Employees	374116	498000	498000	539000	0	0
	105	Personal Cost of Living Allowance	433380	480000	470000	486000	493000	500000
	106	Family Cost of Living Allowance	40043	47000	43000	45000	46000	47000
	110	Overtime Allowance	49132	23000	23000	45000	45000	45000
	111	Additional Allowance	1291101	1405000	1405000	1511000	1534000	1557000
	112	Other Allowances	160000	147000	141000	123000	125000	127000
	113	Transportation Allowance	94016	105000	105000	115000	116000	117000
	114	Transport Allowance	18802	21000	21000	25000	26000	27000
	115	Field Visit Allowance	0	0	0	15000	15000	15000
	116	Employees' Bonuses	900000	996000	996000	1075000	1075000	1075000
	120	Contract Employees	386043	443000	443000	471000	478000	485000
	121	Fixed-term staff	0	0	0	167000	717000	728000
Total			4011384	4426000	4406000	4881000	4938000	4995000
2121		Social Security Contributions						
	301	Social Security	436033	495000	490000	560000	570000	580000
Total			436033	495000	490000	560000	570000	580000
22		Use of Goods and Services						
2211		Use of Goods and Services						
	201	Rents	9850	10000	10000	10000	10000	10000
	202	Telecommunications Services	16989	20000	20000	20000	20000	20000
	203	Water	70607	75000	75000	85000	86000	87000
	204	Electricity	362300	530000	530000	560000	570000	580000
	205	Fuels	59319	70000	60000	60000	60000	60000
	206	Maintenance of Machines, furniture and acces	8962	10000	10000	10000	10000	10000
	207	Maintenance of vehicles, equipment and acces	19008	15000	15000	15000	15000	15000
	208	Repair and maintenance of buildings and acce	17747	15000	15000	15000	15000	15000
	209	Stationery, Publications and Office Supplies	15776	20000	20000	20000	20000	20000
	210	Substances and raw materials (medicines, clo	8861	9000	9000	10000	10000	10000
	211	Cleaning services and supplies including clea	91862	110000	110000	115000	115000	115000
	212	Insurance	49780	55000	50000	50000	50000	50000
	213	Official Travel Missions	27340	30000	30000	30000	30000	30000
	214	Goods and services expenses	726011	780000	775000	778000	795000	795000
Total			1484412	1749000	1729000	1778000	1806000	1817000
28		Other Expenditures						
2821		Other Current Expenditures						
	302	Contributions	311731	230000	230000	235000	235000	235000
	303	Scientific scholarships and training courses	14125	70000	70000	70000	20000	20000
	305	Non-Employees' Bonuses	142446	150000	150000	145000	145000	145000
Total			468302	450000	450000	450000	400000	400000
Total of Chapter			6400131	7120000	7075000	7669000	7714000	7792000

Overall Summary of Capital Expenditures for the Years 2023 - 2027

Chapter : 2003 Jordan Atomic Energy Commission

(In JDs)

Group	Item	Description	Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026	Indicative 2027
		Expenditures						
21		Compensations of Employees						
2111		Salaries, Wages and Allowances						
	502	Wages	0	0	0	20000	20000	20000
		Total	0	0	0	20000	20000	20000
22		Use of Goods and Services						
2211		Use of Goods and Services						
	512	Operating and Sustaining Expenditures	1110629	3300000	2950000	3290000	3240000	3215000
		Total	1110629	3300000	2950000	3290000	3240000	3215000
25		Subsidies						
2511		Subsidies to Public Corporations						
	520	Subsidies to non-financial public corporations/capital	2148172	1780000	1780000	2230000	2580000	2680000
		Total	2148172	1780000	1780000	2230000	2580000	2680000
28		Other Expenditures						
2822		Other Capital Expenditures						
	504	Studies, Research and Consultations	150707	195000	160000	145000	145000	170000
		Total	150707	195000	160000	145000	145000	170000
		Fixed Assets						
31		Non-financial Assets						
3111		Buildings and Constructions						
	508	Works and Constructions	99132	60000	35000	50000	50000	50000
		Total	99132	60000	35000	50000	50000	50000
3112		Devices, Machinery and Equipment						
	505	Equipment, Machines and Devices	213805	230000	140000	235000	235000	235000
	506	Vehicles and Equipment	0	110000	110000	0	0	0
		Total	213805	340000	250000	235000	235000	235000
3122		Inventories						
	503	Materials and supplies	174780	175000	175000	205000	205000	205000
		Total	174780	175000	175000	205000	205000	205000
		Total of Chapter	3897225	5850000	5350000	6175000	6475000	6575000

Appropriations directed for females and child according to chapter : 2003 Jordan Atomic Energy Commission

(In JDs)

Description	2023	2024	2025	2026	2027
Females	895,813	991,114	1,097,487	1,110,997	1,124,501
Child	0	0	0	0	0
Appropriations distributed according to population index					
Females	2,749,471	3,783,030	3,949,410	4,080,070	4,132,240
Child	2,105,978	2,897,640	3,025,080	3,125,160	3,165,120
Total appropriations directed for females	3,645,284	4,774,144	5,046,897	5,191,067	5,256,741
Total appropriations directed for Child	2,105,978	2,897,640	3,025,080	3,125,160	3,165,120

6181 Program Administration and Support Services

Objective of the program :

- 1- Including the nuclear option in national plans to enhance energy and water security.
- 2- Improving and expanding the scope of the Commission's scientific services (sample analysis, irradiation to sterilization, treatment of natural or industrial-origin radioactive wastes, radiological monitoring of workers).
- 3- Preparation of technical and economic studies for the development of the uranium exploration and production project.
- 4- Moving to process and produce larger quantities of uranium ores, improving and increasing the scientific efficiency of the company's cadres.
- 5- Provision of community support and rehabilitation services.

The strategic objective related to the program :

- 1- Promotion of peaceful uses of atomic energy in the areas of water and energy.
- 2- Expanding the exploration and exploitation of Jordan's nuclear materials, most notably uranium.
- 3-Developing infrastructure, institutional development, quality of services and expanding its scope in accordance with local and international standards.
- 4-Strengthening the system of cooperation within the framework of domestic and international institutions and the private sector.
- 5- Supporting scientific research, innovation, creativity and excellence.
- 6- Development of Jordan's capabilities and human resources for the implementation of the Jordanian nuclear programme.

Directorates associated with the program :

- President's Office
- Directorate of Research and Information Laboratories
- Directorate of Irradiation
- Directorate of Radiation and Emergency Protection
- Directorate of Scientific Research and Nuclear Applications
- Quality Directorate
- Directorate of Chemical and Physical Analysis
- Directorate of Safeguards and Nuclear Security
- Directorate of Transport and Radioactive Waste Management
- Directorate of Nuclear Project Development
- Directorate of Advanced Energy Systems
- Directorate of International Cooperation
- Directorate of Information Technology and Cybersecurity
- Directorate of Human Resources
- Directorate of Finance
- Directorate of Administrative Affairs
- Internal Audit and Control Unit
- Institutional Development Unit
- Community Outreach and Communication Unit
- Directorates of the Jordanian Uranium Mining Company

Services provided by the program :

- Providing the following services to the highest quality standards: sample analysis, irradiation to sterilization, management and treatment of radioactive waste, preparedness and response to nuclear and radiological emergencies.
- Provision of specialized consultations and implementation of technical and economic studies and economic feasibility studies for nuclear energy uses in the areas of desalination, water pumping and electricity generation.
- Training and resettlement of Jordanian human resources to work in Jordan's nuclear programme and to explore and mine uranium through their participation in international and regional training programmes and conferences and to inform them of the latest relevant technological developments;
- Providing a stimulating environment for creativity and conducting specialized scientific research.
- Implementation of the economic feasibility study of the uranium project in the central Jordan region.
- Development of uranium and nuclear material surveys and exploration.
- Development of extraction technology according to the latest international standards and production of yellow cake and nuclear material up to commercial production.

Program's main outputs and results during the years (2025 -2027):

- National plans that include peaceful uses of nuclear energy in the areas of desalination, water pumping and electricity generation in Jordan based on studies and technical and economic recommendations implemented by the Commission.
- Developing a national strategy that includes the integration of nuclear and renewable energy into Jordan's energy mix to contribute to mitigating climate change.
- Fruitful international cooperation and relations agreements with IAEA and other specialized international organizations.

The Program's challenges :

- The migration of technically and scientifically qualified national cadres working in the nuclear programme out of Jordan;
- Regional instability and political tensions, which undermine the opportunity to implement nuclear projects and the negative geopolitical impact of some States on the development of Jordan's nuclear programme for peaceful uses in Jordan.
- Difficulty in developing, transferring and localizing nuclear technology according to the latest international standards, requiring support and investment in research and development.
- Lack of adequate financial resources for the development of Jordan's nuclear programme.
- Poor societal awareness of the importance and benefits of Jordan's nuclear programme and its implications for the Jordanian economy.

Actions to address challenges and improve services provided:

- Developing an integrated national strategy that integrates nuclear and renewable energy into the energy mix, with a view to achieving diversity and sustainability in energy supply.
- Stimulating investment in the nuclear energy sector through partnerships with the private sector and international investors, thereby

6181 Program Administration and Support Services

enhancing the economic viability of nuclear projects.

- Focusing on new technologies, such as small and medium-sized nuclear reactors, with lower cost and higher operational flexibility, thus enhancing their competitiveness with other energy sources.
- Investing in continuous training of technical personnel to ensure the development of their skills and keep abreast of the latest technologies.
- Inclusion of small nuclear reactors in desalination and water pumping.
- Approval and activation of the system of the Authority's research system to reduce the migration of cadres.

Staff working in the program :

The program is implemented through a functional staff in 2024 estimated with (206) staff, including (165) males and (41) females .

Appropriations directed for females and child

(In JDs)

Description	2023	2024	2025	2026	2027
Females	547,134	608,233	620,374	628,136	636,097
Child	0	0	0	0	0
Appropriations directed according to population index					
Females	1,789,474	1,628,550	1,842,870	1,991,860	2,038,860
Child	1,370,661	1,247,400	1,411,560	1,525,680	1,561,680
Total appropriations directed for females	2,336,608	2,236,783	2,463,244	2,619,996	2,674,957
Total appropriations directed for Child	1,370,661	1,247,400	1,411,560	1,525,680	1,561,680

Key Performance indicators for Program

Performance Measurement Indicator		Base Year	Value	Actual value	Target value	Preliminary Self Evaluation	Target Value		
				2023	2024	2024	2025	2026	2027
1	Percentage of development of laboratory-level engineering operations to extract uranium and elements associated with the Central Jordan project.	2023	60%	60%	70%	70%	75%	80%	85%
2	Percentage of completion of the design, installation and operation of the pilot factory.	2023	70%	70%	85%	80%	85%	90%	92%
3	Percentage of progress to complete the detailed economic feasibility study of the Central Jordan project.	2023	5%	5%	10%	10%	30%	65%	100%
4	Preliminary economic feasibility study for the production of yellow cake from industrial groupings of phosphoric acid.	2025	-	-	-	-	20%	60%	65%
5	Number of research published in scientific journals.	2023	19	19	18	15	23	25	30

Appropriations 6181 Program Administration and Support Services Per Activities and Projects

(In JDs)

Activities and Projects		Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026 2027	
Current Expenditures		4,048,414	4,386,000	4,351,000	4,433,000	4,439,000	4,479,000
601	Administrative and Support Services	4,048,414	4,386,000	4,351,000	4,433,000	4,439,000	4,479,000
Capital Expenditures		2,507,993	2,135,000	2,095,000	2,605,000	2,955,000	3,055,000
001	Administration and Support Services Program Administration Project	359,821	355,000	315,000	375,000	375,000	375,000
002	Supporting energy projects.	2,148,172	1,780,000	1,780,000	2,230,000	2,580,000	2,680,000
Program / Treasury		2,507,993	2,135,000	2,095,000	2,605,000	2,955,000	3,055,000
Total Program		6,556,407	6,521,000	6,446,000	7,038,000	7,394,000	7,534,000

Current Expenditures According to Program and Activities for the Years 2023 - 2027

Chapter : 2003 - Jordan Atomic Energy Commission

(In JDs)

Program : 6181 - Administration and Support Services

Activity : 601 - Administrative and Support Services

Group	Item	Description	Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026	Indicative 2027
21		Compensations of Employees						
2111		Salaries, Wages and Allowances						
	102	Unclassified Employees	237751	235000	235000	220000	223000	226000
	103	Comprehensive Contract Employees	310205	418000	418000	470000	0	0
	105	Personal Cost of Living Allowance	263929	302000	292000	270000	274000	278000
	106	Family Cost of Living Allowance	25043	30000	26000	23000	24000	25000
	110	Overtime Allowance	24382	10000	10000	20000	20000	20000
	111	Additional Allowance	757442	825000	825000	846000	859000	872000
	112	Other Allowances	142000	134000	128000	110000	111000	112000
	113	Transportation Allowance	60016	71000	71000	67000	68000	69000
	114	Transport Allowance	12882	12000	12000	16000	17000	18000
	116	Employees' Bonuses	485000	500000	500000	500000	500000	500000
	120	Contract Employees	142000	182000	182000	211000	214000	217000
	121	Fixed-term staff	0	0	0	67000	545000	553000
		Total	2460650	2719000	2699000	2820000	2855000	2890000
2121		Social Security Contributions						
	301	Social Security	288365	337000	332000	297000	301000	306000
		Total	288365	337000	332000	297000	301000	306000
22		Use of Goods and Services						
2211		Use of Goods and Services						
	201	Rents	9850	10000	10000	10000	10000	10000
	202	Telecommunications Services	13174	14000	14000	14000	14000	14000
	203	Water	12744	15000	15000	15000	15000	15000
	204	Electricity	4986	5000	5000	5000	5000	5000
	205	Fuels	59319	70000	60000	60000	60000	60000
	001	Heating	13760	15000	15000	15000	15000	15000
	002	Saloon vehicles	28452	35000	30000	30000	30000	30000
	003	Transport vehicles and heavy equipment	17107	20000	15000	15000	15000	15000
	206	Maintenance of Machines, furniture and accessories	7052	8000	8000	8000	8000	8000
	207	Maintenance of vehicles, equipment and accessories	19008	15000	15000	15000	15000	15000
	208	Repair and maintenance of buildings and accessories	14080	11000	11000	11000	11000	11000
	209	Stationery, Publications and Office Supplies	9538	10000	10000	10000	10000	10000
	210	Substances and raw materials (medicines, clothes, food, films, etc..)	4992	5000	5000	5000	5000	5000
	211	Cleaning services and supplies including cleaning contracts	47275	55000	55000	55000	55000	55000
	212	Insurance	13385	15000	15000	15000	15000	15000
	213	Official Travel Missions	19930	20000	20000	20000	20000	20000
	214	Goods and services expenses	701740	735000	735000	733000	750000	750000
	001	Events and hospitality	15512	55000	55000	48000	10000	10000
	008	Advertisements and subscriptions	17710	15000	15000	20000	20000	20000
	013	Services, security and guarding contracts	638572	630000	630000	630000	670000	670000
	014	Shipment and clearance fees	19978	25000	25000	25000	25000	25000
	084	Fees and licenses	9968	10000	10000	10000	25000	25000
		Total	937073	988000	978000	976000	993000	993000
28		Other Expenditures						
2821		Other Current Expenditures						
	302	Contributions	301202	219000	219000	222000	222000	222000
	014	Saving Fund contribution	25502	29000	29000	32000	32000	32000
	018	International Agency for Atomic Energy and Arab Commission	275700	190000	190000	190000	190000	190000
	303	Scientific scholarships and training courses	14125	70000	70000	70000	20000	20000
	000	Scientific scholarships and training courses	11212	20000	20000	20000	20000	20000
	003	Scientific Scholarships and Cultural Exchange	2913	50000	50000	0	0	0
	011	Scholarships	0	0	0	50000	0	0
	305	Non-Employees' Bonuses	46999	53000	53000	48000	48000	48000
		Total	362326	342000	342000	340000	290000	290000
		Total of Activity	4048414	4386000	4351000	4433000	4439000	4479000
		Total of Program	4048414	4386000	4351000	4433000	4439000	4479000

Capital Expenditures According to Program and Projects for the Years 2023 - 2027

Chapter : 2003 Jordan Atomic Energy Commission

(In JDs)

Program 6181 Administration and Support Services								
Project		001 Administration and Support Services Program Administration Project						
Fund Source		102001 Capital (Treasury)						
Group	item	Description	Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026	Indicative 2027
22		Use of Goods and Services						
2211		Use of Goods and Services						
	512	Operating and Sustaining Expenditures						
	015	Operating systems and software	60627	20000	20000	20000	20000	20000
	035	Technical and administrative support	0	45000	45000	20000	20000	20000
		Total of Item	60627	65000	65000	40000	40000	40000
28		Other Expenditures						
2822		Other Capital Expenditures						
	504	Studies, Research and Consultations						
	027	Purchasing consultation services	94270	85000	85000	75000	75000	75000
		Total of Item	94270	85000	85000	75000	75000	75000
31		Non-financial Assets						
3112		Devices, Machinery and Equipment						
	505	Equipment, Machines and Devices						
	001	Computers and accessories	29992	30000	30000	25000	25000	25000
	069	Modernizing and developing devices and equipment	99958	100000	60000	130000	130000	130000
		Total of Item	129950	130000	90000	155000	155000	155000
3122		Inventories						
	503	Materials and supplies						
	006	Laboratories supplies and materials	74974	75000	75000	105000	105000	105000
		Total of Item	74974	75000	75000	105000	105000	105000
		Total of Project / Treasury	359821	355000	315000	375000	375000	375000
Project		002 Supporting energy projects.						
Fund Source		102001 Capital (Treasury)						
Group	item	Description	Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026	Indicative 2027
25		Subsidies						
2511		Subsidies to Public Corporations						
	520	Subsidies to non-financial public corporations/capital						
	031	National Committee for synchrotron	10000	10000	10000	10000	10000	10000
	033	International Committee for synchrotron	738172	370000	370000	470000	470000	470000
	034	Jordanian company for mining	1400000	1400000	1400000	1750000	2100000	2200000
		Total of Item	2148172	1780000	1780000	2230000	2580000	2680000
		Total of Project / Treasury	2148172	1780000	1780000	2230000	2580000	2680000
		Total of Program	2507993	2135000	2095000	2605000	2955000	3055000

6184 Program Nuclear Research/ Nuclear Reactors formerly**Objective of the program :**

- Maintaining the safe operation of Jordan's nuclear reactor for research and training until specialized research, expanding the production of radioisotopes and providing a platform for specialized training at the local and regional levels.

The strategic objective related to the program :

- Sustaining the operation of Jordan's nuclear reactor for research and training and ensuring the optimal use of its applications.

Directorates associated with the program :

- Operations and Operational Management
- Directorate of Nuclear Security
- Radioisotope Production Directorate
- Directorate of Nuclear Safety and Licensing
- Reactor Operating Directorate
- Maintenance Directorate
- Directorate of Radiation Protection and Occupational Safety
- Directorate of Administration and Logistics Services
- Directorate of Compliance and Security
- Directorate of Uses

Services provided by the program :

- Specialized training in nuclear science and technology for students of nuclear engineering and other nuclear sciences and engineers and technicians for the operation, maintenance and development of nuclear reactors, whether from Jordan or the States of the region.
- Providing a specialized platform for scientific research and studies for students of science, nuclear engineering or researchers.
- Provision and transport of radioisotopes for medical and industrial uses.
- Management of radioactive wastes resulting from the reactor's uses in accordance with international principles and standards.
- Analysis using neutron activation technique.
- Provision of technical consultations specializing in the field of nuclear and radiation.
- Analysis using liquid flash counting device.

Program's main outputs and results during the years (2025 -2027):

- Specialized Jordanian professional cadres capable of operating and managing nuclear reactors according to the highest standards of security and nuclear safety.
- Providing Jordan's needs and exporting surplus production of radioisotopes, such as iodine (I-131) and molybdenum (Mo-99), and producing synthetic isotopes such as Ir-192.
- Applications of neutron beams including neutron dispersion, neutron diffraction and materials science research.
- Neutron stitches.
- Pilot regional research and training centre in cooperation and coordination with IAEA.

The Program's challenges :

- Lack of adequate and necessary financial resources for the implementation of the above-mentioned scientific and industrial projects.
- The migration of Jordan's competencies in the nuclear field to work in nuclear projects outside Jordan.
- The difficulty of sustaining and securing the reactor's manufactured nuclear fuel due to prevailing regional and international conditions.

Actions to address challenges and improve services provided:

- Diversification and openness to sources of fuel supply from several international entities.
- Recycling the financial resources derived from the reactor's activities as the primary source for the establishment of the above-mentioned scientific nuclear facilities.
- Approval and activation of the system of researchers to reduce the migration of technical personnel.

Staff working in the program :

The program is implemented through a functional staff in 2024 estimated with (151) staff, including (120) males and (31) females .

Appropriations directed for females and child**(In JDs)**

Description	2023	2024	2025	2026	2027
Females	348,679	382,881	477,113	482,861	488,404
Child	0	0	0	0	0
Appropriations directed according to population index					
Females	959,997	2,154,480	2,106,540	2,088,210	2,093,380
Child	735,317	1,650,240	1,613,520	1,599,480	1,603,440
Total appropriations directed for females	1,308,676	2,537,361	2,583,653	2,571,071	2,581,784
Total appropriations directed for Child	735,317	1,650,240	1,613,520	1,599,480	1,603,440

6184 Program Nuclear Research/ Nuclear Reactors formerly

Key Performance indicators for Program									
Performance Measurement Indicator		Base Year	Value	Actual value	Target value	PreliminarySelf Evaluation	Target Value		
				2023	2024	2024	2025	2026	2027
1	Number of produced radioisotopes.	2023	4	4	5	4	5	6	6
2	Percentage of customer satisfaction of reactor services.	2019	94%	96%	96%	95%	97%	98%	98%
Appropriations 6184 Program Nuclear Research/ Nuclear Reactors formerly Per Activities and Projects (In JDs)									
Activities and Projects		Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026 2027			
Current Expenditures		2,351,717	2,734,000	2,724,000	3,236,000	3,275,000	3,313,000		
601	Nuclear researches	2,351,717	2,734,000	2,724,000	3,236,000	3,275,000	3,313,000		
Capital Expenditures		1,389,232	3,715,000	3,255,000	3,570,000	3,520,000	3,520,000		
003	Establishing and operating the research nuclear reactor	1,389,232	3,715,000	3,255,000	3,570,000	3,520,000	3,520,000		
Program / Treasury		1,389,232	3,715,000	3,255,000	3,570,000	3,520,000	3,520,000		
Total Program		3,740,949	6,449,000	5,979,000	6,806,000	6,795,000	6,833,000		

Current Expenditures According to Program and Activities for the Years 2023 - 2027

Chapter : 2003 - Jordan Atomic Energy Commission

(In JDs)

Program : 6184 - Nuclear Research/ Nuclear Reactors formerly								
Activity : 601 - Nuclear researches								
Group	Item	Description	Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026	Indicative 2027
21		Compensations of Employees						
2111		Salaries, Wages and Allowances						
	102	Unclassified Employees	27000	26000	26000	44000	45000	46000
	103	Comprehensive Contract Employees	63911	80000	80000	69000	0	0
	105	Personal Cost of Living Allowance	169451	178000	178000	216000	219000	222000
	106	Family Cost of Living Allowance	15000	17000	17000	22000	22000	22000
	110	Overtime Allowance	24750	13000	13000	25000	25000	25000
	111	Additional Allowance	533659	580000	580000	665000	675000	685000
	112	Other Allowances	18000	13000	13000	13000	14000	15000
	113	Transportation Allowance	34000	34000	34000	48000	48000	48000
	114	Transport Allowance	5920	9000	9000	9000	9000	9000
	115	Field Visit Allowance	0	0	0	15000	15000	15000
	116	Employees' Bonuses	415000	496000	496000	575000	575000	575000
	120	Contract Employees	244043	261000	261000	260000	264000	268000
	121	Fixed-term staff	0	0	0	100000	172000	175000
		Total	1550734	1707000	1707000	2061000	2083000	2105000
2121		Social Security Contributions						
	301	Social Security	147668	158000	158000	263000	269000	274000
		Total	147668	158000	158000	263000	269000	274000
22		Use of Goods and Services						
2211		Use of Goods and Services						
	202	Telecommunications Services	3815	6000	6000	6000	6000	6000
	203	Water	57863	60000	60000	70000	71000	72000
	204	Electricity	357314	525000	525000	555000	565000	575000
	206	Maintenance of Machines, furniture and accessories	1910	2000	2000	2000	2000	2000
	208	Repair and maintenance of buildings and accessories	3667	4000	4000	4000	4000	4000
	209	Stationery, Publications and Office Supplies	6238	10000	10000	10000	10000	10000
	210	Substances and raw materials (medicines, clothes, food, films, etc..)	3869	4000	4000	5000	5000	5000
	211	Cleaning services and supplies including cleaning contracts	44587	55000	55000	60000	60000	60000
	212	Insurance	36395	40000	35000	35000	35000	35000
	213	Official Travel Missions	7410	10000	10000	10000	10000	10000
	214	Goods and services expenses	24271	45000	40000	45000	45000	45000
	001	Events and hospitality	4857	10000	10000	10000	10000	10000
	014	Shipment and clearance fees	14944	15000	15000	15000	15000	15000
	084	Fees and licenses	4470	20000	15000	20000	20000	20000
		Total	547339	761000	751000	802000	813000	824000
28		Other Expenditures						
2821		Other Current Expenditures						
	302	Contributions	10529	11000	11000	13000	13000	13000
	014	Saving Fund contribution	10529	11000	11000	13000	13000	13000
	305	Non-Employees' Bonuses	95447	97000	97000	97000	97000	97000
	000	Non-employees' bonuses	51922	52000	52000	52000	52000	52000
	012	Bonuses of engineers and geologists	43525	45000	45000	45000	45000	45000
		Total	105976	108000	108000	110000	110000	110000
		Total of Activity	2351717	2734000	2724000	3236000	3275000	3313000
		Total of Program	2351717	2734000	2724000	3236000	3275000	3313000
		Total of Chapter	6400131	7120000	7075000	7669000	7714000	7792000

Capital Expenditures According to Program and Projects for the Years 2023 - 2027

Chapter : 2003 Jordan Atomic Energy Commission

(In JDs)

Program 6184 Nuclear Research/ Nuclear Reactors formerly								
Project		003 Establishing and operating the research nuclear reactor						
Fund Source		102001 Capital (Treasury)						
Group	item	Description	Actual 2023	Estimated 2024	Re-estimated 2024	Estimated 2025	Indicative 2026	Indicative 2027
21		Compensations of Employees						
2111		Salaries, Wages and Allowances						
	502	Wages						
	001	Wages	0	0	0	20000	20000	20000
		Total of Item	0	0	0	20000	20000	20000
22		Use of Goods and Services						
2211		Use of Goods and Services						
	512	Operating and Sustaining Expenditures						
	015	Operating systems and software	48381	50000	50000	50000	50000	50000
	023	Operation contracts	1001621	3185000	2835000	3200000	3150000	3125000
		Total of Item	1050002	3235000	2885000	3250000	3200000	3175000
28		Other Expenditures						
2822		Other Capital Expenditures						
	504	Studies, Research and Consultations						
	014	Studies, researches and design	0	60000	25000	20000	20000	45000
	027	Purchasing consultation services	56437	50000	50000	50000	50000	50000
		Total of Item	56437	110000	75000	70000	70000	95000
31		Non-financial Assets						
3111		Buildings and Constructions						
	508	Works and Constructions						
	040	Constructions	99132	60000	35000	50000	50000	50000
		Total of Item	99132	60000	35000	50000	50000	50000
3112		Devices, Machinery and Equipment						
	505	Equipment, Machines and Devices						
	055	Technical devices	83855	100000	50000	80000	80000	80000
		Total of Item	83855	100000	50000	80000	80000	80000
	506	Vehicles and Equipment						
	003	Pick-up vehicles	0	54000	54000	0	0	0
	005	Medium-size passenger buses	0	56000	56000	0	0	0
		Total of Item	0	110000	110000	0	0	0
3122		Inventories						
	503	Materials and supplies						
	006	Laboratories supplies and materials	99806	100000	100000	100000	100000	100000
		Total of Item	99806	100000	100000	100000	100000	100000
		Total of Project / Treasury	1389232	3715000	3255000	3570000	3520000	3520000
		Total of Program	1389232	3715000	3255000	3570000	3520000	3520000
		Total of Chapter	3897225	5850000	5350000	6175000	6475000	6575000