



The Committee for Setting **National R&D Priority Areas**



August 2022

Recommendation on Israel's National Civilian R&D Priority Areas

**National Council for Civilian Research and Development
(NCRD)**



The Committee for Setting National Science and Technology Priority Areas

Abstract

A large number of bodies engage in research in Israel, namely: academic entities, hospitals, government research institutes, industry, R&D centers of international companies, with R&D funding coming from multiple sources: Israel Planning and Budgeting Committee (VATAT), the government (including the Ministry of Innovation, Science and Technology, the Israel Innovation Authority, and Chief Scientists), the Defense Establishment – Directorate for the Development of Weapons and Technological Infrastructure (Maf'at), the Israeli and international business sectors. In the Arrangements Law 2021-2022, the Minister of Innovation, Science and Technology is called upon to direct the National Council for Civilian Research and Development (NCRD), as the state-appointed body that centralizes and integrates national R&D issues, to set national science and technology priority areas for the government for the coming five years, in the realm of civilian R&D, as set forth in the National Council for Research and Development Law (Section 5)¹. To this end, the Council formed a 17-member dedicated committee, comprising 7 NCRD plenary members, and representatives of the traditional industry and high-tech industry, the defense establishment, the Innovation Authority and government ministries.

In the course of 2021-2022, this committee carried out comprehensive work comprising the following stages:

- A)** Survey of the processes for prioritization of nationally important R&D topics in the reference countries.
- B)** Survey of the processes for selecting R&D topics at Israel's financing bodies: the Israel Innovation Authority, the Israel Planning and Budgeting Committee (VATAT), National Forum for Research and Development Infrastructure (TELEM) and Chief Scientists, and an examination of the Ministry of Intelligence's work methods for identifying emerging technologies.
- C)** Gathering of information on nationally important R&D topics and evaluation of the criteria for ranking the topics.
- D)** Presentation of 14 R&D topics and their ranking based on criteria agreed upon by all the Committee members.
- E)** Final selection and ranking of nationally important R&D topics by a reduced committee (Appendix 1), which did not include representatives of stakeholder entities.

As mentioned, for a period of twelve months, the Committee worked on understanding the manner of selecting R&D areas in Israel and worldwide and was presented with 14 R&D topics (Table 3), which were ranked by the Committee members according to ten criteria. At the end of this process, a sub committee, comprised of unbiased committee members, deliberated on each of the topics, reviewed the rankings and recommended the following research areas: **Bio-Convergence, Blue-Tech (The Sea as a national resource), Food-tech, Renewable Energies and Energy storage, and Civilian Space industry.**

¹ https://www.nevo.co.il/law_html/law01/999_002.htm



Subsequently, in order to identify the specific topics worthy of support in each of the areas, the NCRD recommends establishing an independent expert committee to guide the financing entities. Additionally, the Committee recommends continued government support for the two previously approved areas that received initial support, namely: **Quantum and AI, and Data Science**. The present report describes the Committee's work process and the manner of selecting the priority areas.

The Committee was led by Prof. Peretz Lavie, Chairman of the NCCRD. Committee coordination and writing of the report – Debby Kaufman. Data processing – Dr. Gury Zilkha.



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Chapter A – Methodology: Stages of Selection Process

The Committee's activity was carried out in five stages

Stage A	Stage B	Stage C	Stage D	Stage E
<ul style="list-style-type: none"> ✓ Survey of the prioritization processes in the reference countries 	<ul style="list-style-type: none"> ✓ Survey of the processes for selecting R&D topics at Israel's financing bodies: the Israel Innovation Authority, VATAT, TELEM, Chief Scientists, and an examination of the Ministry of Intelligence's work methods for identifying emerging technologies 	<ul style="list-style-type: none"> ✓ Gathering of information on nationally important R&D topics and evaluation of the criteria for ranking the topics 	<ul style="list-style-type: none"> ✓ Presentation of 14 R&D topics and their ranking based on criteria agreed upon by all the Committee members 	<ul style="list-style-type: none"> ✓ Final selection and ranking of nationally important R&D topics by a sub committee (without stakeholders)

- ⇒ **Stage A: Survey of the prioritization processes in the reference countries:** In this stage, the Committee members met with the company TASC, which prepared for the Ministry of Innovation, Science and Technology an international survey of the benefits deriving from the selection of national priority areas. The survey examined 7 reference countries and included an analysis using written sources of information, reports, articles, ministry websites and interviews (Chapter B).
- ⇒ **Stage B: Survey of the processes for selecting R&D topics at Israel's financing bodies:** the Israel Innovation Authority, the Israel Planning and Budgeting Committee (VATAT), National Infrastructure Forum for Research and Development (TELEM), and Chief Scientists, and an examination of the Ministry of Intelligence's work methods for identifying emerging technologies, in parallel with the gathering of information on nationally important R&D topics suffering from government failure, from research studies, scientific publications, reports² (Chapter C).
- ⇒ **Gathering of information on nationally important R&D topics and evaluation of the criteria for ranking the topics:** This process was carried out over a period of four months (February- May 2022), through a series of sessions during which 14 areas (2 areas per session), selected in the first stage, were presented in detail to the Committee members, as described in Table 3 (Chapter C). The surveys were delivered by top experts in Israel, that have directed and are directing plans of action, each in their own area, and who are asking to be given priority in the allocation of resources, from a purely public interest perspective.
- ⇒ **Stage D: Presentation of 14 R&D topics and their ranking based on criteria agreed upon by all the Committee members:** Ranking was determined based on the materials received by the Committee members, which included reports, a recording of the lecture and summary of the discussion. The ranking was carried out using Excel tables, providing a detailed explanation, which was sent to the Committee

² Appendix 3 –Significant reports used by the Committee and distributed to the Committee members.



members, and was based on criteria (Appendix 2) established following an examination of how national priority areas are selected in Israel and around the world, by R&D supporting bodies (Chapter D).

- ⇒ **Stage E: Final selection and ranking of nationally important R&D topics by a Sub committee (without stakeholders):** This stage included exhaustive discussions on each of the areas and selection of the national priority topics to be submitted to the Inter-Ministerial Committee for Science and Technology. These discussions were conducted by a reduced committee, most of whose members were selected from the NCRD plenum³ (Chapter E).

³ List of NCCRD plenary members: https://www.gov.il/he/departments/general/molmop_members



Chapter B – International Survey

As part of its work, the Committee conducted a comprehensive examination of how national civilian R&D priority areas are selected in several reference countries comparable to Israel. The company TASC carried out a special survey for the Ministry of Innovation, Science and Technology that studied how national R&D priority areas are selected in 7 reference countries: Singapore, Ireland, Britain, the Netherlands, Switzerland, Germany and Denmark (a description of the investment in R&D in each of these reference countries is presented in Appendix 3).

The survey, which was based on interviews, reports, articles, websites and Internet content, explored the priority areas in each country, the process of choosing the priority areas (method, timing, participants and mechanisms), the tools for implementation of the areas selected and the key directions for action, techniques for monitoring and gauging the priority areas, assessment of the major impacts and benefits arising from the selection of priority areas, and their impact on the economic growth. The main conclusions of the report are that countries of the world and international organizations select priority areas to focus on, with the aim of leading to growth and positioning themselves as leaders in these areas and accomplish this through an evaluation process that involves representatives from the public sector, academe and the private sector.

The survey found that the countries with the highest GDP per capita, with an emphasis on small countries, choose national priority areas for R&D and invest dedicated budgets to promote the priority areas through structured methodologies. In addition, these countries conduct an organized consultation, within a committee composed of representatives from the government, academia and the business sector. The selection of priority areas is generally for a period of five years, where the key common denominator in the application and implementation processes of selecting priority areas is the promotion of collaborations between disciplines, the business sector and academe, with emphasis placed on applied research.

Table 1 – A description of the countries that select national R&D priority areas

Most leading OECD countries select national priority areas													
Japan	France	Germany	Italy	Poland	Netherlands	Australia	Korea	Singapore	Switzerland	Ireland	Denmark	UK	
													Similarity to Israel
								✓	✓	✓	✓		Population Size
41.5	40.4	46.5	33.2	15.6	52.3	55	31.8	65.2	81.9	78.6	60.1	42.3	GDP per capita (usd, 2019)
✓	✓	✓								✓	✓	✓	Social and governance structure
✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	OECD membership

In addition, even though the various countries differed in their criteria for selecting priority areas, there were some common criteria such as: areas with significant economic potential, areas in which the country exhibits



significant strength, and areas that pose a national or global challenge. Likewise, all the countries focus on attracting world-leading researchers and companies in the selected priority areas (meaning, attracting international investments to the country), and on commercializing the knowledge by creating research infrastructure and promoting collaborations between the research bodies and industry.

Priority areas selected by the reference countries – The main areas invested in by the reference countries were multidisciplinary ones relating to science and technology. The areas of smart medicine, sustainability and green technologies, with emphasis on artificial intelligence (AI), were the most predominant in the reference countries, indicating the importance of these topics in said countries. Other prominent areas that earned the support of the various committees and countries were: advanced manufacturing and engineering, information technologies and communications.

Table 2 – Summary of the selection of prioritization areas in 7 countries⁴

Country/ Parameter	Singapore (Program 2011-2015)	Ireland (Program 2012)	UK (Program 2012)	Netherlands (Program 2014)	Switzerland (Program 2013-2017)	Germany (Program 2014)	Denmark (Program 2012)
Number of areas	6	14 (11 vertical and 3 horizontal areas)	8 meta-technologies and 7 topics	16	Updated on an ongoing basis	12	5 areas in the Research Program and 5 in the INNO+ Program
Manner of selecting priority areas	Selection by a committee headed by the Prime Minister; advice from committees with the participation of leading researchers	Selection by a professional committee with the participation of public, research and industry representatives	Professional consultation led by a government ministry	Broad consultation with the public and stakeholders	Broad consultation with the public and stakeholders	Professional consultation led by the government	In both programs – consultation with many stakeholders led by a government ministry, which made the final decision
Implementation period	5 years	5 years	Selection in 2012 – implementation until today	7 years	New topics selected every 2-3 years	Selection in 2014 – implementation until today	Research – 5 years, INNO+ – one-time
Degree of importance of priority areas in the science and technology budget	High	Medium-high	Medium	Low	Low*	Medium	Medium-low
Resolution of the selected priority areas	Horizontal topics – breakdown into subtopics in some of the areas	Horizontal topics	8 horizontal meta-technologies; 7 focused topics	Horizontal topics based on an aggregation of challenges in a variety of life areas	Focused topics Illic	Horizontal topics**	Research – high, INNO+ – focused

⁴ Source: TASC –International Survey of Processes for the Selection of a National Priority; presented to the Committee for Prioritization of National Civilian R&D Priority Areas (NCCRD)



Chapter C – Prioritization Processes at Israel's Financing Bodies

As noted in the report's abstract, a large number of bodies engage in research in Israel, namely: academic entities, hospitals, government research institutes, industry, R&D centers of international companies, with R&D funding coming from multiple sources: Israel Planning and Budgeting Committee (VATAT), the government (including the Ministry of Innovation, Science and Technology, the Israel Innovation Authority, and Chief Scientists), the Defense Establishment – Directorate for the Development of Weapons and Technological Infrastructure (Maf'at), the Israeli and international business sectors (among others: industry, non-industry business entities, such as venture capital funds, and more). Before convening to select the topics to be presented, the NCRD's Prioritization Committee studied the modus operandi of bodies engaged in the financing of science in Israel: Israel Planning and Budgeting Committee (VATAT), National Forum for Research and Development Infrastructure (TELEM), Chief Scientists, Israel Innovation Authority, Ministry of Intelligence, and the NCRD which provides an integrative perspective.

- ⇒ **VATAT:** Establishes multiyear programs that aim to promote striving for excellence in the national priority areas. A major consideration is prioritizing scientific excellence. Today, VATAT's focus is on data science, personalized medicine, and quantum science and technology. The order of priorities, established by a methodology based on direct contact with the heads of universities ("captains of science"), questionnaires distributed to government ministries and offices, and mapping of the situation in Israel, determines the budget allocation.
- ⇒ **TELEM:** In the TELEM forum, the following position holders/officials collaborate on a volunteer basis: Chairman of the Planning and Budgeting Committee (VATAT) of the Israeli Council for Higher Education, Director General of the Ministry of Innovation, Science and Technology, Head of the Directorate for the Development of Weapons and Technological Infrastructure (Maf'at) at the Ministry of Defense, Deputy Director of the Budget Department at the Ministry of Finance, and a representative of the Israel Academy of Sciences and Humanities (Chairman). The program has been in existence for 25 years, and, on average, one program is approved every year. The forum's member bodies support every program for 5 years (with the Ministry of Finance generally contributing 15% of the support). Thereafter, the activities must seek alternative sources of funding. The main fields engaged in in recent years were: space, quantum science and artificial intelligence. The process of adopting topics at TELEM consists of three stages: a proposal by one of the forum's member bodies, the decision to form an examining committee when interest is shown by a number of forum bodies that have no common criteria, a discussion held by the TELEM forum on how to operate in the particular R&D area and on the scope of financing.
- ⇒ **Innovation Authority:** The underlying consideration of the Innovation Authority for support of civilian R&D in Israel is sustainable overall economic growth. The support methodology comprises the following three channels:
 1. **Ongoing support:** The criteria for this channel for support include: innovation, focused operational ability, business aspects and investment excess returns for the economy. Other things that are occasionally considered are investment in companies that will succeed in raising supplementary funds, worker availability in the particular area, and geographic location. Another parameter evaluated is market failure, with a need to prioritize one R&D area or another. Each year some 4,000 budget requests are submitted. Prioritization of R&D areas is done in two independent stages that examine and rank the requests. The one stage is carried out by professional examiners, while the second is a decision by an investment committee.



2. **Horizontal support:** Support of consortiums and infrastructures. The Innovation Authority identifies market failures and endeavors to incentivize activities in areas where the failure exists, with a view to identifying areas in which technological maturity and knowledge gaps are optimally timed for investments. In the framework of this channel, there is collaboration with TELEM, since 70% of the budget under this item is earmarked for national programs. The investment in artificial intelligence and quantum technology was carried out via this channel.
 3. **Policy and strategy:** This channel is intended to preserve capabilities and to detect warning signs of threats to the Israeli high-tech industry, such as the manpower predicament. A plan of action is drawn up at the Innovation Authority to address a particular strategic problem. Thus, for example, the Innovation Authority found the field of bio-convergence in a state of crisis and set about promoting the field.
- ⇒ **Chief Scientists:** Israel's Chief Scientists are responsible for initiating, supervising and operating public projects of scientific interest, as well as running the research activities at the government ministries in which they work. They are also responsible for planning the long-term research deriving from the government's activities, in coordination with the NCRD. Ultimately, they are the ones that chart the course of research in the areas covered by the ministry in which they work.
- ⇒ **Ministry of Intelligence:** The methodology used for the identification of emerging technologies at the Ministry of Intelligence is based on an exhaustive use of big data and advanced AI capabilities, known as "horizon scanning." Horizon scanning is performed in a number of countries and organizations out of an understanding of the importance of carrying out organized analysis-based, strategic future planning processes. There are various models of this mechanism, which is still undergoing development. Prominent common features include: the existence of a dedicated research function for the topic, multidisciplinary, and a combination of foresight methods and the use of technological tools. Since the establishment of the unit, 420 technologies have been identified.
- ⇒ **Israel National Council for Civilian Research and Technology (NCRD):** Acts pursuant to the National Council for Research and Development Law, and serves as the strategic thinking engine of the Ministry. The role of the Council is to evaluate the R&D systems existing in Israel and identify their needs, strengths and weaknesses. The Council advises the government on national policy in R&D areas, reports and conducts surveys on the scientific situation and on research in Israel as a tool for achieving national goals. In addition, the NCRD proposes national policy and budget recommendations for R&D areas which it seems critical for the country (after evaluation). The Council acts from a national and integrative perspective, and therein lies its advantage.



Chapter D – R&D Areas Presented and Evaluation of Criteria for Ranking Them

Fourteen R&D areas were selected for presentation before the committee. These were determined following a process of three stages as mentioned in the preceding chapters. Table 3 presents the areas, specifying the presentation dates and presenters' names. Following its presentation, each area was ranked based on 10 criteria (the criteria appear after Table 3 below), as described in the chapter on methodology. The criteria were established following an examination of how national R&D priority areas are selected in Israel and around the world, by the R&D supporting bodies.

Table 3 – The areas presented to the Committee for Setting National R&D Priority Areas

	Topic	Name of Presenter
1	Bio-Convergence*	Prof. Rivka Carmi
2	Drug Development Sector	Prof. Nir London
3	Foodtech*	Nir Goldstein
4	Photonics	Haim Russo and Dan Vilensky
5	Space*	Uri Oron
6	Blue-Tech (The Sea as a National Resource for Israel)*	Prof. Shaul Horev
7	Fostering Innovation in the Modern Energy Sector*	Dr. Gideon Friedman
8	Smart Cities	Prof. Pnina Plaut
9	Unmanned Aircraft	Alon Unger
10	EdTech	Dr. Avi Warshavsky
11	Chip Industry	Ilan Spillinger
12	Agrotech "Smart Agriculture"	Prof. Yoram Kapulnik
13	Waste Treatment Challenges and the Circular Economy in Israel and the World	Prof. Ofira Ayalon
14	Robotics as a Technological, Economic and Social Growth Engine in a New Reality	Prof. Zvi Shiller

* Areas selected as a national priority

Criteria for Selecting Priority Areas

1. Is there a potential for economic growth, and improvement in employment and welfare?

2. Does Israel have a comparative advantage?

3. Does the area pose a unique national challenge for Israel?

4. Will there be a contribution to collaboration between academia, industry and government authorities?

5. Will immediate implementation yield results?



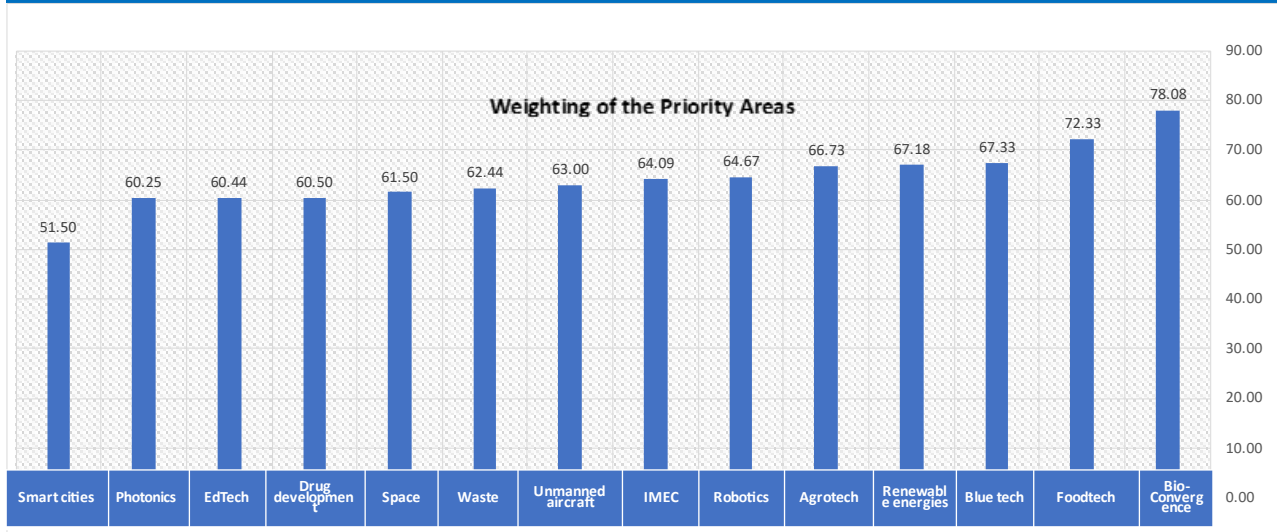
6. Is there any need for government support and what is its scope?
7. Does the area have scientific importance?
8. Is it a sufficiently broad area?
9. Does Israel have sufficient and essential manpower for that area?
10. Does developing this area has horizontal implications for society and the economy, including social and economic effects?

Chapter E – Results of the R&D Areas Selected

After ranking of the 14 areas presented to the committee members, the rankings were weighted (Table 4). The leading areas following weighting of the scores were **Bio-Convergence and Foodtech**. However, an in-depth evaluation of selecting areas to be awarded investment required an additional deliberation process which was conducted in the framework of a smaller committee, whose members included most of the NCCRD non-stakeholder plenary members. After a second-round evaluation, the following areas were selected: **The Blue-Tech (sea as a national resource), Renewable Energies and Energy storage, and Civilian Space industry**. The selection considerations of the members of the downsized committee included international comparisons and global competition, Israel's standing in these areas and the ability to yield a significant investment return for Israel over the next five years, the manpower base for these areas, and scientific ability. Furthermore, these areas were also a national priority in the reference countries, which decided to carry out significant investments in said areas. In order that Israel should not lose its standing and succeed in making an impact, the members of the NCCRD committee decided to prioritize these areas. As regards the civilian space area, which received a relatively low score from the full committee, it was decided to promote this area due to the great need for government support in this realm, as well as the civilian potential lying therein, particularly in the present period (Appendix 5 specifies the score for each criterion in each area).

Table 5 – Average scores of the ten criteria determined for each of the R&D areas presented before the committee

* Scores given on a range from 1 to 10



Description of the Selected Areas:

⇒ **Bio-Convergence** – A relatively new area based on innovative technologies, which combine areas of biology with one or more other areas or engineering techniques, such as: electronics, artificial intelligence, computational biology, physics, nanotechnology, materials science and advanced genetic engineering, with a view to addressing challenges in the fields of medicine, agriculture, food, energy and defense. The accelerated development in these fields enables a significant quantum leap with the unification of all the



areas under a single umbrella. Moreover, a revolution has been taking place in recent years in the field of medicine and health around the world, brought on by two causes: the global crisis in the health systems and biopharma industry, driven by a sharp increase in health spending and in the costs for developing new drugs, as well as technological breakthroughs in the fields of engineering, biology and medicine. This revolution has spawned a new multidisciplinary industry, which is based on the amalgamation of various technologies from the fields of biology and engineering. The area of bio-convergence, which combines methods and disciplines from the areas of biology and engineering, is considered the next wave of technology of the 21st century.

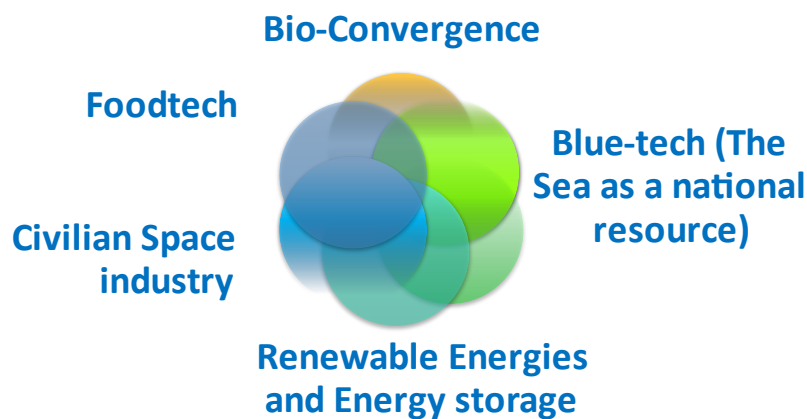
- ⇒ **Foodtech** – Global demand for protein is only rising. However, the animal protein industry creates environmental damage and exacts a heavy price, as a result of inefficient manufacturing, greenhouse gas emissions, contamination of water sources, and utilization of extensive land areas leading to the destruction of natural sources. On top of that, the growth of the world's population, which according to forecasts is projected to reach 10 billion by 2050, could lead to a doubling of the protein demand; hence, the urgent need to create sustainable alternative sources of food, particularly protein. Israel, which is considered a technology leader in many fields, has entered the world of food, or as it is dubbed – foodtech, and has become a global leader also in this niche. At the same time, in order to ensure Israel's leadership, it is necessary to consider the whole array of areas and the creation of a stable ecosystem in the area of alternative protein, so that it should become a magnet for experts and investors from around the world. The area of alternative protein refers to food products developed by a technology that provides an alternative to animal protein. Development of the technology enables creating a wider range of alternative proteins, more similar in texture, taste and appearance to animal protein.
- ⇒ **Blue-Tech (The Sea as a national resource and marine agriculture)** – The area comprises three key topics: removal and relocation of infrastructures offshore – artificial islands, marine agriculture and blue economy. In Israel, these topics are being explored primarily at the Haifa Research Center for Maritime Policy & Strategy, which has summarized recommendations to promote the area in Israel. To make this area significant for Israel requires taking several steps, specifically: formulating a policy and strategy for Israel proper; formulating Israeli foreign policy in the Eastern Mediterranean and the Red Sea; getting the State of Israel prepared and ready for emergency maritime civilian events; preparing for the impacts of climate change on Israel's maritime space; developing and utilizing energy resources at sea and preserving the environment; advancing and formalizing maritime law and jurisprudence; developing human infrastructure for Israel to cope with challenges in its maritime space, and in its shipbuilding and ports sector; relocating offshore infrastructure onshore, and establishing Israel's standing as a startup nation in the marine area.
- ⇒ **Renewable Energies and Energy Storage** – Israel's energy sector faces multiple challenges, including the reduction of carbon dioxide emissions, increase in the use of renewable energies, and development of storage technologies. One of the prominent issues in Israel in the area of energy is the utilization of oil and contaminating fuels in the transportation and electricity sectors, accounting for more than 90% of the types of energy in Israel, thus requiring that focus be placed on these sectors with regard to the study of emission reduction measures. Additionally, Israel is considered an energy island. It is barely connected to its neighbors, and as a small and densely populated country, its use of solar energy is limited because of the need for extensive areas. At the same time, Israel operates in an environment of innovation, which requires functional continuity. The assumption is that the fostering of green energies, as well as the development of the area of energy, will lead to Israel's economic growth coupled with improvement in employment and welfare.



⇒ **Civilian Space Industry** – Israel has significant civilian assets in the domain of space, which in recent years has been gathering economic momentum in the civilian domain. Space science can leverage a host of other applications in science and technology, as it is a world of multidisciplinary content presently in a state of turmoil. Moreover, the domain of space science acts as a locomotive to pull education, academia and industry after it. Due to Israel's R&D capabilities in this field, space science offers an extensive basis for the country's technological advancement. In addition, Israel currently accounts for less than a percent of the global space industry. Nevertheless, Israel's potential in this domain is huge, with the domain expected to grow in terms of jobs, the entry of multinational companies and scientific capabilities. As mentioned, this area was not awarded a high score, but the members of the downsized committee saw paramount importance in supporting this area, due to breakthroughs in the civilian space domain in recent years, and because of the importance of state investments in the enormous costs of R&D development in it.

Chapter F – Conclusion and Recommendations

The five areas selected by the Committee for Prioritization of Nationally Important Research
Topics for government investments in civilian R&D



After a year of meetings, discussions and a survey of the R&D areas being invested in by countries worldwide, and guided by an integrated and wide-ranging approach, the NCRD Committee selected five topics it deemed strategic and fundamental for global competition as well as for continued advancement of Israel's cutting-edge technologies, with a view to ensuring Israel's economic future and maintaining Israeli excellence over the next five years. All the selected topics interface with each other in one way or another, and nearly all of them are considered multidisciplinary areas, which will presumably be key areas in the future and are primarily expected to expand rapidly over the next five years. As reported herein, in the international survey, all countries investing in R&D areas ultimately enjoy an excess return on investments. In addition, R&D investments bolstered the state of employment and quality of life, as well as generated surplus growth in countries that had set national R&D priorities. The State of Israel, which relies on its human resources and the knowledge it has accumulated in the high-tech fields, is likely to lose its relative advantage in the cutting-edge technology areas, if it forgoes these investments. Without R&D investment, the State is liable to find its growth and innovation metrics slipping. Therefore, further to the process carried out by the Committee for Setting National Civilian R&D Priority Areas in Israel, the NCCRD recommends:

1. Adopting the recommendations on investment in the five areas: Bio-Convergence, Foodtech, Blue-Tech (The Sea as a national resource), Renewable Energies and Energy storage, and Civilian Space Industry.
2. Establishing an independent experts committee for each R&D area to identify the specific topics worthy of support in the particular area, and to provide guidance to the financing entities.
3. Continuing to provide government support to the two areas previously approved and granted initial support, namely: Quantum, AI and Data Science.

*** The NCRD thanks the Committee members who voluntarily devoted their time to working for the benefit of the country.**