

**The FORTNIGHTLY**

A Review of Middle East Regional Economic & Cultural News & Developments

**7 December 2022**

**13 Kislev 5783**

**13 Jumada Al-Awal 1444**

**Written & Edited by Seth J. Vogelman\***

**TABLE OF CONTENTS**

[1. ISRAEL GOVERNMENT ACTIONS & STATEMENTS](#_Toc121244247)

[1.1. President Herzog Visits Bahrain in First Visit by an Israeli Head of State](#_Toc121244248)

[1.2. UAE President Sheikh Mohamed bin Zayed Receives the President of Israel](#_Toc121244249)

[1.3. Israel and Japan Open Free Trade Accord Negotiations](#_Toc121244250)

[1.4. Israel & Bahrain Complete First Round of Free Trade Talks](#_Toc121244251)

[2. ISRAEL MARKET & BUSINESS NEWS](#_Toc121244252)

[2.1. Carrefour Private Brand Already Cutting Prices in Israel](#_Toc121244253)

[2.2. CyberBee & EyeCloud Receive BIRD HLS Grant of $1.75 Million](#_Toc121244254)

[2.3. Shield Raises $20 Million in a Series B Financing Round](#_Toc121244255)

[2.4. CommonGround Raises $25 Million to Deliver Immersive 3D Meetings for Everyone](#_Toc121244256)

[2.5. Israel Launches a $17 Million Self-Driving Public Bus Project](#_Toc121244257)

[2.6. Sygnia Accelerates Growth with Expanded Presence in Latin America and Australia](#_Toc121244258)

[2.7. Lockheed Martin & Israel's Rafael to Develop a Laser Weapon System](#_Toc121244259)

[2.8. Rezonate Emerges from Stealth to Disrupt How Enterprises Protect Cloud Identities](#_Toc121244260)

[2.9. Highcon & SEE Announce Strategic Collaboration](#_Toc121244261)

[2.10. NeuReality Raises $35 Million to Bring AI Accelerator Chips to Market](#_Toc121244262)

[3. REGIONAL PRIVATE SECTOR NEWS](#_Toc121244263)

[3.1. Flat6labs & Others Launch 'Makers' to Support Contech Startups in Egypt](#_Toc121244264)

[3.2. US Expats Renounce Citizenship as UAE Offers More Attractive Lifestyle](#_Toc121244265)

[3.3. Abu Dhabi’s Below Farm Grows Six Varieties of Premium Mushrooms](#_Toc121244266)

[3.4. UAE’s Fenix Games Secures a $150 Million Investment](#_Toc121244267)

[3.5. NWTN UAE Electric Vehicle Assembly Facility to Be Completed in Fourth Quarter](#_Toc121244268)

[3.6. Nestle to Invest $1.9 Billion in Saudi Arabia Over Next Decade](#_Toc121244269)

[3.7. Saudi Arabia’s Ceer Secures a Site for its New EV Factory](#_Toc121244270)

[3.8. Saudi Blue Ammonia is *En Route* to South Korea](#_Toc121244271)

[3.9. Saudi's Mirai Solar Makes Solar Panel Shades Screen for Greenhouses ‎](#_Toc121244272)

[3.10. American VC Fund 500 Global Comes to Egypt Despite Tech Downturn](#_Toc121244273)

[3.11. With $3 Million in New Funding, OneOrder Sets Out on a Growth Drive](#_Toc121244274)

[3.12. Egyptian Car Sales Drop Again in October](#_Toc121244275)

[4. CLEAN TECH & ENVIRONMENTAL DEVELOPMENTS](#_Toc121244276)

[4.1. Morocco Allies with Israel for Water Desalination & Reuse](#_Toc121244277)

[4.2. UAE Enacts Green Construction Regulations](#_Toc121244278)

[4.3. PIF’s Badeel is Leading a Consortium for a 2.06 GW Solar Plant in KSA](#_Toc121244279)

[4.4. Amea Power Secures Over $1 Billion in Funding for Egypt’s Renewables Projects](#_Toc121244280)

[4.5. Egypt to Sign Contracts for 21 Desalination Plants in 2023](#_Toc121244281)

[4.6. Faced With Water Stress, Lydec Will Ration Drinking Water in Casablanca](#_Toc121244282)

[4.7. Morocco to Spend Over $12 Billion on Green Investments Over 4 Years](#_Toc121244283)

[5. ARAB STATE DEVELOPMENTS](#_Toc121244284)

[5.1. Lebanon’s Inflation Remains High but at a Lower Rate of 158.46%.](#_Toc121244285)

[5.2. Robust Tourism Activity for Lebanon in September](#_Toc121244286)

[5.3. Jordan to Receive $845.1 Million Under Annual US Budget Support Grant Agreement](#_Toc121244287)

[5.4. Jordan's Trade Deficit Rises by 32% in January-September 2022](#_Toc121244288)

[►►Arabian Gulf](#_Toc121244289)

[5.5. S&P Turns More Positive on Bahrain as Oil Prices Surge](#_Toc121244290)

[5.6. Qatar Signs Deal to Sell Germany Natural Gas](#_Toc121244291)

[5.7. UAE & Japan to Sign MoU on Establishing a Joint Business Council](#_Toc121244292)

[5.8. Abu Dhabi’s GDP Grows by 11.2% in the First Half of 2022](#_Toc121244293)

[5.9. Saudi Arabia Launches $703 Million Island Tourism Plan](#_Toc121244294)

[5.10. Saudi Space Commission Announces Launch of Saudi Space Accelerator Program](#_Toc121244295)

[►►North Africa](#_Toc121244296)

[5.11. Private-Sector Contraction Deepens Following Egyptian Pound Devaluation](#_Toc121244297)

[5.12. Cairo Approves Plans for IP Authority](#_Toc121244298)

[5.13. World Bank Forecasts Remittances to Egypt to Increase by 2.5% This Year](#_Toc121244299)

[5.14. The Central Bank of Egypt’s Financial Inclusion Drive](#_Toc121244300)

[5.15. Egypt's Economy Grew by 4.4% in the First Quarter of 2022 Despite Headwinds](#_Toc121244301)

[5.16. Egypt to Build City an Artificial Island to Protect Alexandria](#_Toc121244302)

[5.17. Egyptian National Railways Gets $329 Million in Funding from EIB and AFD](#_Toc121244303)

[5.18. Morocco’s Trade Deficit Surges to 56% Amid Ongoing Price Shocks](#_Toc121244304)

[5.19. Morocco Ranks Second in the Africa Industrialization Index](#_Toc121244305)

[6. TURKISH, CYPRIOT & GREEK DEVELOPMENTS](#_Toc121244306)

[6.1. Turkish Government Banks on Gulf Financial Support to Save Economy](#_Toc121244307)

[7. GENERAL NEWS AND INTEREST](#_Toc121244308)

[\*ISRAEL:](#_Toc121244309)

[7.1. Hanukkah Holiday to be Celebrated Starting on 18 December](#_Toc121244310)

[7.2. Google Invests More Than $15 Million in Israeli High-Tech Training](#_Toc121244311)

[7.3. Report Shows Rise in Obesity & Smoking Among Israelis](#_Toc121244312)

[\*REGIONAL:](#_Toc121244313)

[7.4. UAE Announces List of Public Holidays for 2023](#_Toc121244314)

[7.5. Saudi Arabia Announces Public Holiday after Historic FIFA World Cup Win](#_Toc121244315)

[7.6. Jeddah to Open Saudi Arabia's First Independent Cinema](#_Toc121244316)

[7.7. Sudan's Transition Deal Seen as Significant, But Doubts Remain](#_Toc121244317)

[8. ISRAEL LIFE SCIENCE NEWS](#_Toc121244318)

[8.1. Debiopharm Leads $6 Million Round for YonaLink to Scale Global Growth](#_Toc121244319)

[8.2. Enlivex Receives Allocetra Clearance from FDA for Treatment of Solid Malignancies](#_Toc121244320)

[8.3. ChickP Raises Dairy-Free Ice Cream to New Heights](#_Toc121244321)

[8.4. BiondVax Successful In Vivo Study of Its Inhaled COVID-19 NanoAb Therapy](#_Toc121244322)

[8.5. BeeHero Raises $42 Million](#_Toc121244323)

[8.6. Lumen Raises $62 Million in a Series B Financing Round](#_Toc121244324)

[8.7. Nectin Therapeutics Raises $25 Million in Series A Financing](#_Toc121244325)

[8.8. ICL Pioneers Sustainable Citrus Fruit Preservation with FruitMag](#_Toc121244326)

[9. ISRAEL PRODUCT & TECHNOLOGY NEWS](#_Toc121244327)

[9.1. Seraphic Named Gold Winner in 2022 ‘ASTORS’ Homeland Security Awards](#_Toc121244328)

[9.2. NanoLock Brings Built-in Meter-Level Cybersecurity to Renesas Customers](#_Toc121244329)

[9.3. Logz.io Unveils Open 360 Platform for Optimal Observability](#_Toc121244330)

[9.4. BBT.live Accelerates Secure Access with NVIDIA BlueField DPU Platforms](#_Toc121244331)

[9.5. Leading Israeli Bank Selects MazeBolt RADAR Testing to Identify DDoS Vulnerabilities](#_Toc121244332)

[9.6. Comlabs Selects Gilat for US Government Critical Communications Requirements](#_Toc121244333)

[9.7. Elbit Systems’ Simulation Infrastructure Becomes Cloud Native](#_Toc121244334)

[9.8. Otonomo Delivers New Fleet Product Enhancements to Streamline User Experiences](#_Toc121244335)

[9.9. Adaptive Shield Releases SaaS-to-SaaS Capabilities to Minimize Risks](#_Toc121244336)

[10. ISRAEL ECONOMIC STATISTICS](#_Toc121244337)

[10.1. Israeli Startups Raised Over $600 Million in November](#_Toc121244338)

[10.2. Jerusalem Slips To Second-Lowest Socio-Economic Tier](#_Toc121244339)

[10.3. Israel's Average Salary Rises by 4.7%](#_Toc121244340)

[10.4. Chinese Shake Up Israel's New Car Market](#_Toc121244341)

[11. IN DEPTH](#_Toc121244342)

[11.1. ISRAEL: Israel Agrees to Qatar's Drilling in the Lebanese Maritime Gas Field](#_Toc121244343)

[11.2. ISRAEL: Education Abroad Comes With a High Cost for Israeli Students](#_Toc121244344)

[11.3. KUWAIT: Benefits from Oil Price Boom but Long-Term Economic Challenges Loom](#_Toc121244345)

[11.4. EGYPT: Japan's Nomura Bank Says EGP Most Vulnerable EM Currency](#_Toc121244346)

ISRAEL GOVERNMENT ACTIONS & STATEMENTS

[Back to Table of Contents](#TOC)

* 1. President Herzog Visits Bahrain in First Visit by an Israeli Head of State

Bahrain's King Hamad bin Isa Al Khalifa met President Isaac Herzog in Manama on 4 December in the first visit by an Israeli head of state to the Gulf state since the countries forged ties two years ago. Herzog will then visit the United Arab Emirates, which also normalized ties with Israel in US-brokered pacts known as the Abraham Accords and had already hosted the Israeli president. Herzog described the meeting as a natural continuation of the 2020 breakthrough in relations between Israel and four states in the Arab world. King Hamad also voiced hope the visit would strengthen bilateral relations. (IH 05.12)

[Back to Table of Contents](#TOC)

* 1. UAE President Sheikh Mohamed bin Zayed Receives the President of Israel

On 6 December, UAE President Sheikh Mohamed bin Zayed met with President Herzog of Israel, who is in the UAE to participate in the Abu Dhabi Space Debate. Sheikh Mohamed welcomed President Herzog and his wife, First Lady Michal Herzog, at Al Shati Palace in Abu Dhabi. The two leaders discussed areas of collaboration between the UAE and Israel and their interest in promoting progress and stability across the region. They also exchanged views on a number of issues of mutual concern. The meeting highlighted the role of the Abu Dhabi Space Debate in facilitating dialogue between participants in the global space sector to explore opportunities for sustainable growth and collaboration. Sheikh Mohamed and President Herzog confirmed the importance of boosting UAE-Israel cooperation in the space sector. (WAM 05.12)

[Back to Table of Contents](#TOC)

* 1. Israel and Japan Open Free Trade Accord Negotiations

In late November, the Japan-Israel Economic Partnership was rekindled when Israeli delegates met in Tokyo to discuss conclusion of a free trade accord. Led to the table by outgoing Prime Minister Lapid as an agreement of intent, the parties agreed to launch a study group for mutually beneficial trade. Japan stands as the third-largest economy with over 85 thriving companies operating in Israel. Israeli exports totaling $1.24 billion and Japanese exports worth $2.3 billion would significantly boost the economic growth of both nations. Following a decade of negotiations, Israel said it was happy to begin the process of talks towards a trade agreement with Japan. This could lead to lowering tariffs, lowering the price of Japanese cars and goods imported to Israel and helping to increase Israeli exports to Japan. (Various 24.11)

[Back to Table of Contents](#TOC)

* 1. Israel & Bahrain Complete First Round of Free Trade Talks

Israel and Bahrain successfully completed the first round of talks on a free trade agreement, Israel's Economy Ministry said on 21 November. The negotiating teams met then in Manama and discussed various issues including trade in goods, regulation and standardization, customs, trade in services, government procurement, e-commerce and the protection of intellectual property rights. The rapid progress in the negotiations reflects the importance that both sides attach to this agreement.

If the deal is reached, it will be Israel’s second such agreement with an Arab state in the last two years after the signing of the Abraham Accords negotiated by the U.S. A similar deal was sealed with the United Arab Emirates in May. The next round of talks is scheduled for December and is expected to be held in Israel. In 2021, the volume of Israeli exports to Bahrain reached $3.8 million, while imports from the Gulf country to the Jewish state amounted to $3.5 million.

While the scope of Bahrain's trade ties with Israel is only a small fraction of what Israel has with the UAE, Jerusalem's relations with Manama have been a lot warmer and closer than with Abu Dhabi. A clear example to that is the security cooperation agreement Israel and Bahrain signed back in February, a year after signing the Abraham Accords. This was the first such pact Israel had reached with one of its new allies in the Gulf. Nevertheless, whether economic or security, Israel is continuing to bolster its ties with the Arabian Gulf. (i24NEWS 21.11)

ISRAEL MARKET & BUSINESS NEWS

[Back to Table of Contents](#TOC)

* 1. Carrefour Private Brand Already Cutting Prices in Israel

Even before the local launch of the French retail giant's supermarkets, Carrefour Israel said the private brand products that have already impacted prices. Carrefour is the largest international supermarket chain to have ever entered Israel. The company has annual sales of €81 billion from nearly 14,000 branches in over 40 countries. Carrefour is also one of the world's biggest food manufacturers with hundreds of production plants worldwide with 14,000 food and household products under the 20 brands that it owns.

Electra Consumer Products, which is bringing Carrefour to Israel, is pinning its hopes on Carrefour's thousands of private brand products. Since June, Electra Consumer Products Mega and Yeinot Bitan supermarket chains have been selling 50 of these private brand products, which have been gradually introduced onto the shelves, and the company is now for the first time publishing data about these sales.

Israelis are known to be loyal to brands, often regardless of price. Carrefour's private label prices may be a cheap alternative, but the question is whether price levels will be sustained over time. The answer depends on a number of factors, including the import reforms and easing of bureaucracy.

One of the reasons for the price gap between Israel and France is related to the product labeling law. Carrefour prints the same table for different countries, but for Israel it is necessary to print a nutritional table and list of ingredients, which requires every carton and pallet that arrives in Israel is opened, the products are taken out, a sticker is stuck on the back of the product, and then it is returned to the packaging. Such requirements can increase prices by 10%-15%. (Globes 21.11)

[Back to Table of Contents](#TOC)

* 1. CyberBee & EyeCloud Receive BIRD HLS Grant of $1.75 Million

The binational team of CyberBee and EyeCloud will jointly develop an indoor mini-drone to help first responders in the U.S. and Israel navigate GPS-denied interior spaces in emergency situations. The resulting product is expected to be operational by the end of 2024.

Selected by the U.S. Department of Homeland Security Science and Technology Directorate (DHS S&T) and the Israel Ministry of Public Security (MOPS), this latest BIRD HLS project is designed to make it easier for rescue teams to locate victims of earthquakes, fires or terror attacks trapped inside buildings, and to follow perpetrators inside civilian structures such as banks, department stores and schools - all-too-familiar sites of recent violence.

Marking the seventh consecutive year of the BIRD HLS program, the collaboration between CyberBee and EyeCloud helps reinforce the U.S.-Israel initiative’s original mission of developing advanced first responder technologies for the homeland security sector and improving public safety in both countries. (BIRD 01.12)

[Back to Table of Contents](#TOC)

* 1. Shield Raises $20 Million in a Series B Financing Round

Shield announced its $20 million Series B financing round, which was led by Macquarie Capital and joined by UBS through its venture and innovation unit UBS Next, Mindset Ventures and OurCrowd. Following its $15 million Series A round in early 2022, Shield’s rapid year-over-year growth and market demand leading to a constantly growing pipeline drove this latest funding. With more than 100 employees, Shield will use funds from its Series B financing to further grow in existing markets and expand into new ones, including the US. The firm is also opening its second R&D facility in Lisbon, Portugal, and will also use the capital to propel its leadership in innovation, as it continues the development of its leading financial compliance platform.

Macquarie Capital, Shield’s largest investor and the lead investor for the Series B financing round, Mindset Ventures and OurCrowd are all joining the latest round after initial investment in Shield’s Series A. Shield has now raised a total of $35 million in 2022.

Ramat Gan's [Shield](https://www.shieldfc.com) is an advanced end-to-end communication compliance platform that allows organizations of any size to mitigate risks, escape the dead-end legacy archive, improve operational efficiency, and reduce compliance costs. Shield redefines the way enterprises and financial institutions manage and mitigate communications compliance risks by applying advanced AI, NLP, and visualization capabilities. Shield is specifically built for today’s digital work environment, where organizations face multiple risks, including financial crime, privacy and misconduct. (Shield 01.12)

[Back to Table of Contents](#TOC)

* 1. CommonGround Raises $25 Million to Deliver Immersive 3D Meetings for Everyone

CommonGround has raised an additional $25 million, bringing its total funding to nearly $45 million to build an immersive virtual meeting experience that reimagines the future of online interactions. As the world moves to increasingly remote, hybrid, and virtual environments, the company provides a platform that fosters authentic human connections. With real-life 3D representations of users far surpassing what's possible on present-day platforms, users will finally be able to restore the deep personal connections we all crave.

iPhone users interested in creating their free 'TrueSelf Scan' avatar – the first step to joining a meeting on CommonGround – can do so here. The first 500 to create their avatar will also be invited to test the first immersive 3D meeting app that does not require a VR headset. Unlike other virtual environments, CommonGround's patented AI, with three years in the making, provides a powerful, immersive, and secure 3D experience with hyper-realistic user representations that deliver an unparalleled sense of presence and emotional connection. This allows participants to establish eye contact, communicate through nonverbal body language, and be seen as their full, true self – seated among colleagues in a virtual room, face to face, rather than being another blankly staring face in a sea of squares.

Based in Silicon Valley and Tel Aviv, [CommonGround](https://www.commonground-ai.com/%E2%80%8E) aims to improve communications and online collaboration. Founded in 2019, the company is led by a world-class team of engineers with expertise in AI, computer vision, geometry processing, 3D graphics, communications, DevOps and real-time video compression. CommonGround is backed by leading venture capital firms and investors: Matrix Partners, Grove Ventures, StageOne Ventures and Marius Nacht. (CommonGround 30.11)

[Back to Table of Contents](#TOC)

* 1. Israel Launches a $17 Million Self-Driving Public Bus Project

Four consortia of international and Israeli companies have been chosen to operate a two-year pilot program to test autonomous public transportation in Israel. The 7 November announcement by the Transportation Ministry and the Israel Innovation Authority follows a call for proposals issued in September 2021. In additional to Israel, the consortia includes companies from France, the U.S., Turkey and Norway.

The first phase of the $17.75 million pilot will consist of experiments at test sites, while the second will be conducted under a temporary license along public transportation lanes. The pilot follows Knesset legislation in March 2022 to develop a knowledge base regarding the safety of independent vehicles. It also aims to determine the impact on traffic congestion. While the law applies to public and private vehicles, initial approval is expected only for public transportation, at least for the first decade. (AL-Monitor 04.12)

[Back to Table of Contents](#TOC)

* 1. Sygnia Accelerates Growth with Expanded Presence in Latin America and Australia

Sygnia announced that it has expanded its business operations in Latin America and Australia. Sygnia established a new office in Sydney as well as new executive leadership in both Mexico City and Sydney to deepen its incident response and cyber security consulting services.

With industry-leading customers based in the Latin American and Australian regions, Sygnia’s expanded presence will allow the team to provide local support for its existing customers, as well as grow its footprint within these key markets. The move to open an office in Sydney marks the sixth international office for Sygnia, adding to its established offices in Tel Aviv, New York, Singapore, Mexico City and London.

Tel Aviv's [Sygnia](http://www.Sygnia.co) provides incident response and cyber security consulting services, helping organizations worldwide to quickly contain and remediate attacks and proactively enhance their cyber resilience. The proven track record, commitment, and discretion have earned Sygnia the trust of security teams, senior executives, and management boards at leading organizations worldwide including many of the Fortune 500 companies. (Sygnia 05.12)

[Back to Table of Contents](#TOC)

* 1. Lockheed Martin & Israel's Rafael to Develop a Laser Weapon System

Lockheed Martin and Israeli contractor Rafael have teamed up to create a high-energy laser weapon system, based on a technology already under development in Israel that could be market ready next year. The idea, the companies said, is to produce a version of the Iron Beam, which is a laser-based air defense system being developed separately by Rafael and Israel's Ministry of Defense, geared towards the U.S. market and elsewhere. Iron Beam passed a series of tests in the last year that "proved the operational capability of the system", they said.

Israel hopes to deploy Iron Beam as early as next year as a much cheaper alternative for neutralizing enemy rockets and drones than the interceptor missiles it currently uses. The system, a prototype of which was unveiled last year, uses lasers to super-heat and disable aerial threats. Iron Beam is meant to be an addition to Israel's current air defenses based on Iron Dome, David's Sling and Arrow - systems that launch interceptor missiles costing between tens of thousands and millions of dollars each. (Various 05.12)

[Back to Table of Contents](#TOC)

* 1. Rezonate Emerges from Stealth to Disrupt How Enterprises Protect Cloud Identities

Rezonate emerged from stealth with $8.7 million in financing for its disruptive cloud identity protection platform that prevents access risk and stops attackers’ actions to breach cloud infrastructure, where modern organizations' critical data resides. Backing this new approach are State of Mind Ventures and Flybridge, with participation from toDay Ventures, Merlin Ventures seed fund, renowned security executives, angels and strategic investors.

Rezonate is creating the industry's first Cloud Identity Protection Platform (CIPP). The Rezonate platform creates a unified view across identity and cloud infrastructure providers, giving Security and DevOps teams the power to detect, prioritize and remediate identity-based threats in real time. In addition to advancing Rezonate’s unique cloud identity protection approach across all clouds and identity providers, and from build time to real time, the funds will further accelerate go-to-market efforts to meet the growing demand for the platform and enable the delivery of new innovations and partnerships.

Tel Aviv's [Rezonate](https://www.rezonate.io) is the Cloud Identity Protection Platform (CIPP) CISOs rely on to eliminate an adversary’s opportunity to breach cloud identity and access. Built for security and loved by DevOps teams, Rezonate transforms the way we protect identities – human or machine – across clouds and identity providers. Their agentless platform combines continuous identity posture, identity detection and response (ITDR) and operational visibility, from build time to real time, to provide security that is as dynamic and automated as the infrastructure it is protecting. (Rezonate 06.12)

[Back to Table of Contents](#TOC)

* 1. Highcon & SEE Announce Strategic Collaboration

Highcon announced an $8 million investment by Northampton, Massachusetts's Sealed Air Corporation in the context of a strategic collaboration between the two companies. The scope of the strategic collaboration includes developing new product offerings, expansion into new segments and enabling manufacturing efficiencies by leveraging Highcon technology.

SEE, with revenues of $5.5 billion in 2021, is in business to protect, solve critical packaging challenges, and "make our world better than we find it." SEE has identified that Highcon's digital paperboard converting capabilities and its unequalled knowhow around laser cutting of paperboard can support and accelerate their vision and business objectives. The strategic collaboration includes the purchasing of a Highcon Beam 2C system for delivery and installation in the first quarter of 2023. The in-house presence of the system will allow SEE to accelerate the testing of new designs and products, as well as the manufacturing and delivery of corrugated products to the company's customers.

Yavne's [Highcon](http://www.highcon.net) develops, markets, sells and supports a portfolio of digital cutting and creasing systems that cover a wide range of formats, substrates and applications. The Highcon technology is transforming the industry, by providing cost effective solutions to the increasing manufacturing inefficiencies facing folding carton and corrugated carton manufacturers as the result of the emerging market trends of e-commerce, shorter time to market, lower job sizes and a drive to sustainability. The Highcon digital technology bridges the gap between agile production and design flexibility delivering improved responsiveness, JIT production, short runs, customization of structure and design, and the ability to perform a wide range of applications in-house. (Highcon 06.12)

[Back to Table of Contents](#TOC)

* 1. NeuReality Raises $35 Million to Bring AI Accelerator Chips to Market

NeuReality announced that it raised $35 million in a Series A funding round led by Samsung Ventures, Cardumen Capital, Varana Capital, OurCrowd and XT Hi-Tech with participation from SK Hynix, Cleveland Avenue, Korean Investment Partners, StoneBridge, and Glory Ventures.

From the start, NeuReality focused on bringing to market AI hardware for cloud data centers and “edge” computers, or machines that run on-premises and do most of their data processing offline. The startup’s current-generation product lineup, the Network Attached Processing Unit (NAPU), is optimized for AI inference applications, including computer vision (think algorithms that recognize objects in photos), natural language processing (text-generating and classifying systems) and recommendation engines (like the type that suggest products on e-commerce sites). NeuReality’s NAPU is essentially a hybrid of multiple types of processors. It can perform functions like AI inferencing load balancing, job scheduling and queue management, which have traditionally been done in software but not necessarily very efficiently.

Caesarea's [NeuReality](http://www.neureality.ai) is an innovative semiconductor startup, focusing on the future challenges of this growing demand, by designing the next evolution of AI-as-a-Service Infrastructure. NeuReality, which currently has 40 employees, plans to hire 20 more over the next two fiscal quarters. To date, it’s raised $48 million in venture capital. (NeuReality 06.12)

REGIONAL PRIVATE SECTOR NEWS

[Back to Table of Contents](#TOC)

* 1. Flat6labs & Others Launch 'Makers' to Support Contech Startups in Egypt

Flat6Labs, the Arab world's leading seed and early-stage venture capital firm, has launched ‘Makers’ a construction-tech Innovation program in collaboration with SIAC, a leading regional private construction firm, and Dar-Al-Handasah, an international consulting company in engineering, to foster startups in the construction technology solutions across Egypt. Makers Contech program includes a pre-accelerator for early stage startups and an accelerator program with an investment component for more advanced startups. The pre-accelerator program aims to promote construction industry innovation through connecting and engaging with various stakeholders with extensive expertise, as well as to creating sustainable innovation ecosystems for construction-related challenges within SIAC, Dar and the industry at large.

The Makers Contech Innovation Program in its pre-accelerator stage will provide selected startups with strategic mentorship, entrepreneurship-focused business training, subject matter one-on-one sessions, and a wide range of perks and services from partners. The pre-accelerator program is designed to support entrepreneurs by guiding them in developing and presenting their innovative ideas and solutions to SIAC and Dar, with the possibility of being selected to run a pilot program with both companies. After completing the program, startups will be well-positioned to raise funding.

The pre-accelerator program also aims to shed light on the significance of the construction revolution and the adoption of new digital technologies in the construction sector in order to boost its competitiveness and productivity. Bringing the construction industry one step closer to a more sustainable, productive, and technologically advanced environment. Flat6Labs will continue to empower startups by providing funding, technical assistance and networking opportunities. (Flat6Labs 23.11)

[Back to Table of Contents](#TOC)

* 1. US Expats Renounce Citizenship as UAE Offers More Attractive Lifestyle

Over 150,000 UAE Golden Visas were issued since 2019, Passport Legacy, a Swiss boutique firm has observed a surge in the number of expatriate high-net-worth individuals who are renouncing their US citizenship. A reported 2,872 HNWI (high net worth) expatriates renounced their US citizenships in the first three-quarters of 2022, exceeding the number throughout the previous year which was 2,421.

A recent poll found that American expats are reaching their wit’s end; 4% are planning to relinquish their US citizenship, while 18% are seriously considering it. A vast majority of American citizens do not think that they should have to pay US taxes while living abroad and feel like they are not represented fairly by the US government. More than four in 10 say they would abandon their US citizenship due to the burden of filing taxes, it is seen as an unreasonable expectation for many to file income taxes on worldwide earnings such as salaries, interest, rental income, business profits and more. (AB 23.11)

[Back to Table of Contents](#TOC)

* 1. Abu Dhabi’s Below Farm Grows Six Varieties of Premium Mushrooms

Abu Dhabi’s [Below Farm](https://www.belowfarm.ae/) needs little water and no arable land to grow six varieties of premium mushrooms. The vertical agritech startup — founded by a Polish couple and British expat — grows 120 tons of varieties like pink oyster, shiitake and lion’s mane mushrooms annually, supplying Abu Dhabi’s supermarkets and online delivery companies.

Below Farm grows mushrooms on blocks made from a combination of waste wood, palm frond cuttings and grains which are then compressed, packed in bags and sterilized, before being fed with mycelium — a mushroom starter culture. The logs are stacked in an automated system that controls temperature and humidity until the mushrooms sprout. Incisions are made in the plastic bags, allowing the fungi to absorb oxygen and grow. The blocks are reused many times before being composted or used for fuel or fertilizer, and a data monitoring system uses algorithms to optimize the specific growth conditions for each variety of mushrooms cultivated. (Below Farm 29.11)

[Back to Table of Contents](#TOC)

* 1. UAE’s Fenix Games Secures a $150 Million Investment

Fenix Games has raised $150 million from Phoenix Group and Cypher Capital. Fenix Games aims to create a publishing platform for blockchain games. The platform will focus on the marriage of game market economies and live operations to provide publishing services to all game models, premium, free-to-play, and blockchain gaming across all platforms.

The new company suggests that blockchain gaming is heading toward a consolidation where big companies are going to emerge by acquiring or funding all strong startups. In other words, Fenix Games hopes to be in a good position to roll up a lot of companies together into a single strong company with a big portfolio. Fenix Games believe a very narrow set of games is being developed so far for blockchain platforms. The idea is to create a publisher and platform company that plays a key role in bringing blockchain games to market.

Founded in 2022, Dubai's [Fenix Games](https://www.fenixgames.com/) is a next-generation games publisher facilitating the transition of the next billion gamers into a blockchain-integrated future. Whereas traditional, “Web 2.0” games have mature distribution platforms and markets that bring billions of players and developers together, Web 3.0 lacks the infrastructure, tools and support to facilitate mass adoption. As more, and more quality developers embrace blockchain technology and design principles, we see an opportunity for the role of Publishing to elevate its value in the design, go-to-market and operations of games. (Fenix 28.11)

[Back to Table of Contents](#TOC)

* 1. NWTN UAE Electric Vehicle Assembly Facility to Be Completed in Fourth Quarter

[NWTN](https://www.nwtnmotors.com), an eco-conscious mobility technology company bringing passenger-centric green premium mobility solutions to the world, announced that construction on its UAE electric vehicle assembly facility in Khalifa Industrial Zone Abu Dhabi (KEZAD) is on schedule and will be completed in Q4/22. The facility will serve the growing demand for sustainable transport options in the Middle East and beyond, and will play an important role in promoting new energy mobility and sustainable energy transformation in the UAE and the Middle East.

Founded in 2016, NWTN is headquartered in the UAE and aims to integrate avant-garde design, life-style personalization, IoT connectivity, autonomous driving technology, and green energy eco-systems to its future mobility solutions. With increasing accessibility and affordability of sustainable energy supported by infrastructures such as NWTN’s KEZAD plant, the UAE’s transformation towards a sustainable and intelligent future will be significantly accelerated. (NWTN 28.11)

[Back to Table of Contents](#TOC)

* 1. Nestle to Invest $1.9 Billion in Saudi Arabia Over Next Decade

Nestle will invest SAR7 billion ($1.86 billion) in Saudi Arabia in the coming 10 years, starting with a plant to make infant products and ready-to-drink coffee, as the kingdom looks to attract more foreign investments to diversify its oil-dependent economy. The plant, set to open in 2025 with an initial investment of SAR375 million, will serve Saudi Arabia and export markets in the Middle East and North Africa, the Swiss food giant said in a statement. The investments over the next decade are expected to create 3,500 direct and indirect jobs. Saudi Arabia has set a target of attracting around $100 billion a year of foreign direct investment by 2030 albeit most of the FDI has been into the oil industry. Of the nearly $20 billion of FDI last year, about $12 billion was related to an oil pipelines deal by state-owned oil producer Saudi Aramco. (GB 25.11)

[Back to Table of Contents](#TOC)

* 1. Saudi Arabia’s Ceer Secures a Site for its New EV Factory

Saudi Arabia’s first EV company, Ceer, has secured a site for its $96 million electric vehicle factory. Ceer has secured a 1 million m2 plot in the King Abdullah Economic Center near King Abdullah Port on Saudi’s west coast. Construction is scheduled to begin early next year.

Saudi Arabia's Public Investment Fund (PIF) set up Ceer as a JV with Taiwan’s Foxconn Technology Group earlier this month to design, manufacture, and sell EVs in Saudi Arabia by 2025. The factory is expected to attract more than $150 million in foreign direct investment and is expected to contribute $8 billion to the country’s GDP by 2034. Ceer will also license component technology from BMW for use in the development process and EV models will include sedans and 4x4s, the statement adds.

PIF previously invested upward of $1 billion in US-based luxury EV manufacturer Lucid Motors as part of the country’s economic diversification strategy. The plant — which began construction earlier this year — will produce 155,000 vehicles annually by 2025 and 80% of Lucid’s EVs will be produced in Saudi Arabia in 2030. (Enterprise 30.11)

[Back to Table of Contents](#TOC)

* 1. Saudi Blue Ammonia is *En Route* to South Korea

Saudi Aramco and Sabic Agri-Nutrients shipped the world’s first commercial load of blue ammonia to South Korea. The companies shipped 25,000 tons of low-carbon blue ammonia to Lotte Fine Chemical (LFC), with the shipment expected to arrive in early December. Saudi mining company Maaden will also export 25,000 tons of blue ammonia to LFC by the end of the year.

Aramco said it was earmarking billions of dollars in a bid to establish itself as a major blue hydrogen exporter. The CTO said export discussions with Japan and South Korea were the ones “farthest along” with Aramco, which had sent test cargoes totaling 40 tons of blue ammonia to Japan in 2020.

Blue ammonia is a carrier for hydrogen, which many in industry are tipping as one of the fuels of the future for hard-to-decarbonize industries. Although not as environmentally-friendly as green ammonia, it’s still seen as a source of clean energy. Unlike conventional production, blue ammonia involves the use of carbon capture, which stores the CO2 underground and prevents its release into the atmosphere. Blue ammonia can be used to produce clean urea fertilizers, to fuel ships, to power cement production more sustainably, and to fire factories. (Enterprise 30.11)

[Back to Table of Contents](#TOC)

* 1. Saudi's Mirai Solar Makes Solar Panel Shades Screen for Greenhouses ‎

Saudi startup [Mirai Solar](https://miraisolar.com/) has created a solar panel shade screen for greenhouses to harness energy generation while protecting plants from excessive sunlight in agri-voltaic farming. The company — supported by King Abdullah University of Science and Technology — co-developed its installation mechanism with German shade screen specialist Novavert to accommodate greenhouses of different sizes.

The semi-transparent foldable and retractable PV shade screen allows a fraction of the light hitting the screen to be absorbed in the solar cell to generate electricity, while the remaining sunlight is allowed through and dispersed into the greenhouse. The folding system enables the shade screen to be drawn back to control sunlight and optimized control. Shade screens reduce the heat load in a greenhouse, maintaining humidity around the plants and reducing stress from excessive sun and heat in areas with high solar radiation. The shade screen keeps the PV glass-less and light, and protects the panel from dirt and heat in the environment.

Mirai’s technology can reportedly generate electricity from shaded parking spots in car parks to recharge electric vehicles, and the foldable screens can be attached to modular containers — like the ones used for food service — or camper vans and boats. Mirai is currently running pilots in different locations and will introduce a turnkey system in Q4/23. (Mirai 29.11)

[Back to Table of Contents](#TOC)

* 1. American VC Fund 500 Global Comes to Egypt Despite Tech Downturn

The San Francisco-based 500 Global has signed an agreement with Egypt’s Information Technology Industry Development Agency. Together, they will launch the following programs to support Egyptian startups: A boot camp for very early-stage startups known as the “seed” stage of funding,  a “scale-up” program to help startups in the Series A stage that are anticipating more investment and a boot camp for startup accelerator managers. This refers to a mentorship program where startups receive guidance, limited funding and other forms of support in return for equity.

500 Global will also open an office in Cairo per the agreement. The company did not say when the office will open, but it will be their first on the African continent. Egypt’s startup scene has grown considerably in recent years. Egyptian startups work in a variety of fields, including climate change, fintech and agriculture. Startups in Egypt and the region are experiencing a downturn at present, however. Regional venture investment decreased in Q3/22. Several Egyptian startups are also laying off workers. The Egyptian-founded transportation startup SWVL also just cut 50% of its workforce and ceased operating in Pakistan. Earlier this year, SWVL was acquiring other companies.

Egypt is not the only country in the region experiencing this. Israeli startups have experienced massive layoffs this year. Funding and new job openings in Israeli tech are also on the decline. (Al-Monitor 28.11)

[Back to Table of Contents](#TOC)

* 1. With $3 Million in New Funding, OneOrder Sets Out on a Growth Drive

OneOrder has raised $3 million seed funding led by Nclude, with participation from A15 and Delivery Hero Ventures. The latest funding brings the total funding raised by the startup to $10.5 million, including $6.5 million working capital financing from financial institutions.

Launched in March this year, OneOrder makes it possible for restaurants to order food supplies through its online platform, solving the fragmented supply chain challenges that lead to erratic prices, waste, quality issues and storage cost. By using its platform, restaurants no longer have to deal with tens of suppliers, and can order only what they need, for next-day delivery, stemming wastage and doing away with the need for warehouses. The platform also ensures operational efficiency and helps restaurants save money by leveraging OneOrder’s economies of scale.

The startup plans to use the funding to scale its operations in Egypt including increasing its warehouse footprint, and to explore growth opportunities within the Gulf Cooperation Council (GCC) region and Africa. OneOrder plans to, via its partners and backed by its extensive data, begin extending working capital financing options to restaurants as a way of helping them scale their operations.

Cairo's [OneOrder](https://www.oneorder.net/) is a technology enabled supplier and wholesale distributer, catering to HORECA, with a passion to reduce all your supply chain costs and related overheads, therefore maximizing your business profitability and simplifying the process for your business. One Order partners with more local ranchers, growers, and producers than any distributor in the industry. We support farm to table initiatives to deliver the best products from anywhere, to everywhere. (OneOrder 05.12)

[Back to Table of Contents](#TOC)

* 1. Egyptian Car Sales Drop Again in October

Monthly auto sales in Egypt fell in October as the industry faces continued import difficulties. Less than 6,100 passenger vehicles were sold last month, down 69% from the same month last year, according to figures released by the Automotive Information Council (AMIC), an industry group. Passenger vehicle sales hit a 4.5 year low for a second consecutive month — excluding April 2020, when sales slumped amid the outbreak of the pandemic.

Around 1,400 buses were sold during the month, down 43% from October last year. Truck sales were down 63% to 1,500 units. Total vehicle sales dropped 65% y-o-y to 9,000 in October. AMIC figures reflect data contributed by member distributors, who include most (but not all) industry participants.

The central bank is in the process of rolling back import restrictions it introduced in February to preserve foreign currency. The new rules made it almost impossible for distributors to bring fully built up vehicles, assembly kits, and spare parts into the country and forced a number of global car manufacturers to suspend sales to Egypt. The restrictions could be fully lifted by the end of the year — but it will likely take longer to solve an FX shortage that is reportedly slowing the release of goods at ports — and to repair the severed links in our auto supply chain. (Enterprise 29.11)

CLEAN TECH & ENVIRONMENTAL DEVELOPMENTS

[Back to Table of Contents](#TOC)

* 1. Morocco Allies with Israel for Water Desalination & Reuse

An agreement was recently signed between the Moroccan National Office of Electricity and Water (ONEE) and the National Water Company of the State of Israel (MEKOROT), in the field of desalination and the reuse of treated wastewater. The aim of this partnership is to develop alternative water supply solutions in the face of drought.

Morocco’s interest in Israel is not insignificant. In this Middle Eastern country, 85% of wastewater will be recycled by 2022 and nearly 80% of the drinking water consumed in Israel will be supplied by five seawater desalination plants according to official estimates. The Cherifian kingdom is counting on this expertise to secure the water supply for its populations by 2035. Barely 500 m3 of fresh water will be available per capita per year in Morocco in 2022, compared to 2,500 m3 in 1960 according to the United Nations (UN). Thus, a framework will be established for the implementation of cooperation actions in the fields of seawater desalination.

ONEE and MEKOROT will cooperate on research, development and capacity building, including communication and awareness-raising on the use of desalinated water and the reuse of treated wastewater. In this way, Morocco hopes to adapt to the water stress affecting households and the agricultural sector. The Moroccan government expects to supply 100 million m3 of treated wastewater to Moroccans per year by 2027. By 2050, this capacity is expected to increase to nearly 340 million m3 per year, which represents an 80% treatment rate in Morocco. The North African kingdom currently operates 159 wastewater treatment plants that handle 56% of the wastewater in urban centers. The kingdom’s daily production of drinking water from the exploitation of this resource barely reaches 232,000 m3. (Afrik21 23.11)

[Back to Table of Contents](#TOC)

* 1. UAE Enacts Green Construction Regulations

On 4 December, the UAE cabinet approved regulations designed to lower carbon emissions in the construction sector. The National Building Regulations and Standards had been in the works since the Dubai Expo 2020 in March.

The regulations and standards include sustainability guides for buildings, roads, housing, and a National Guide for Building Sustainability in operation and maintenance. Implementing these new guidelines — the mechanism for which have not been disclosed — are expected to reduce the construction industry’s CO2 emissions by 5%. They are expected to cut back on natural resources and material use in the industry by 15%, lower energy consumption for the construction of roads by 45%, reduce the energy needed for constructing buildings and homes by 25%, and cut 16% of the country’s overall water utilization rates

.

The UAE also launched an online investment vehicle for FDI inflows in the UAE, including renewable energy and smart city projects. The investment tool — which the UAE cabinet is likening to an investment compass — will provide intelligence to foreign investors on how to invest in ongoing and future renewable energy projects. (Enterprise 05.12)

[Back to Table of Contents](#TOC)

* 1. PIF’s Badeel is Leading a Consortium for a 2.06 GW Solar Plant in KSA

A joint venture between Saudi renewable energy developer Acwa Power and Saudi Arabia’s Water and Electricity Holding Company (Badeel) signed a 35 year power purchase agreement (PPA) with the Saudi Power Procurement Company (SPPC) for a 2.06 GW solar plant in Al Shuaibah. The $1.75 billion facility is set to be the largest of its kind in the Middle East and is expected to come online by Q4/25.

The joint venture — Shuaibah 2 Electrical Energy Company — will develop the facility. Badeel, a unit of the kingdom’s Public Investment Fund (PIF), and Acwa Power will each hold a 50% stake in the JV. A consortium of Acwa Power, Badeel and Saudi Aramco Power Company established the Sudair One Renewable Energy Company in August 2021. The SAR 3.4 billion company signed a PPA with the SPPC as an offtaker for the 1.5 GW Sudair solar plant in Riyadh. (Enterprise 01.12)

[Back to Table of Contents](#TOC)

* 1. Amea Power Secures Over $1 Billion in Funding for Egypt’s Renewables Projects

The UAE’s Al Nowais subsidiary Amea Power secured $1.1 billion in debt and equity funding for a 560 MW solar plant and 505 MW wind farm in Egypt. Construction of the facilities is due to begin in December and will be delivered under a build-own-operate (BOO) framework.

The World Bank’s International Finance Corporation (IFC), Dutch development bank FMO and Japan International Cooperation Agency (JICA) are collectively providing $500 million for the solar plant. Meanwhile, the $800 million wind farm is receiving $500 million from the Japanese Bank for International Cooperation, the IFC, and three commercial banks — Sumitomo Mitsui Banking Corporation, Sumitomo Mitsui Trust Bank and Standard Chartered Bank. The IFC managed to mobilize a working capital facility from CIB, the statement said, without disclosing the exact amount the bank is lending.

The Abydos solar plant and Amunet wind project will generate over 4,000 GWh a year of power, according to the IFC. Power from Abydos will be priced at $0.02/KWh, while power from Amunet will be priced at $0.03/KWh — among the least expensive rates globally. Construction of the Abydos solar plant near Kom Ombo should be finished within 18 months, and the Amunet wind farm in the Gulf of Suez within 30 months.

Durig COP27, Amea committed to a 390,000 ton per annum green ammonia plant in Egypt’s Ain Sokhna that could be up and running by the end of 2025. It’s adding 20 MW of capacity to its solar project in Togo to reach 70 MW. Its portfolio also includes a $100 million 100 MW solar plant in Tunisia and a 100 MW wind project in Morocco. The company has some 6 GW of renewables projects in 15 countries in the pipeline. (Enterprise 01.12)

[Back to Table of Contents](#TOC)

* 1. Egypt to Sign Contracts for 21 Desalination Plants in 2023

The Sovereign Fund of Egypt CEO announced that Egypt will sign contracts to build 21 desalination plants next year, and over 200 developers from 35 countries have shown interest in bidding for the projects. The projects will make up the first $3 billion phase of the government’s desalination program. These plants are expected to process a combined 3.3 million cubic meters of water per day. The program will later expand this to 8.8 million cbm/d at a total cost of $8 billion. Pre-qualification to bid for the plants opened late last month and was set to close at the end of last week, government sources reported. (Enterprise 04.12)

[Back to Table of Contents](#TOC)

* 1. Faced With Water Stress, Lydec Will Ration Drinking Water in Casablanca

The inhabitants Casablanca will have to get used to a reduction in the flow of water in their taps from 1 December 2022. This measure, announced by Lydec, the subsidiary of the Suez group in Morocco, aims to adapt to the water stress that Morocco has been experiencing for several months.

Casablanca continues its fight against water stress. Faced with this situation exacerbated by the drought, Lydec, the Moroccan subsidiary of the French group Suez which manages water distribution, is considering rationing water consumption.

According to the company, the initiative will contribute to optimizing the management of drinking water distribution in Greater Casablanca, where it provides public drinking water services, wastewater and rainwater collection, electricity and public lighting for over 4 million inhabitants. Earlier in March 2022, the company initiated an awareness campaign with the aim of ensuring “better management of the water resource deficit, water shortage (vigilance, alert and crisis), and water reserves during the summer season”.

In this context, Lydec is implementing a drinking water supply project to improve the supply of several households in Casablanca and its surroundings, particularly in the Palmier district in the neighboring Mâarif council. (Afrik21 05.12)

[Back to Table of Contents](#TOC)

* 1. Morocco to Spend Over $12 Billion on Green Investments Over 4 Years

Morocco announced that it will invest nearly $12 billion over four years in renewable energies. The investment program was presented by the CEO of the OCP Group in the presence of King Mohammed VI. It will extend from 2023 to 2027 and will open up new opportunities for specialized foreign companies.

The OCP Group, which has tripled its fertilizer production capacity in the last ten years, is one of the world's leading producers and exporters of phosphate fertilizers. Its new program aims to increase the production capacity of fertilizers with a long-term objective of carbon neutrality before 2040, according to a press release from the king's cabinet. The group plans to supply all of its industrial facilities with green energy by 2027 by investing massively in solar and wind energy. Under the initiative 600 Moroccan industrial companies will be supported, generating 25,000 jobs.

Morocco's ambition is to supply the new seawater desalination capacity in order to meet both the needs of the OCP Group and the supply of drinking water and the irrigation of riparian areas of the group's sites. As the world's largest importer of ammonia, OCP wants to reduce these purchases by investing in alternative energy sources, in particular green ammonia and green hydrogen. It will allow the company to enter the green manure market and create fertilization solutions adapted to the specific needs of different soils and crops. (i24NEWS 04.12)

ARAB STATE DEVELOPMENTS

[Back to Table of Contents](#TOC)

* 1. Lebanon’s Inflation Remains High but at a Lower Rate of 158.46%.

According to Lebanon's Central Administration of Statistics (CAS), the monthly inflation rate eased from a 173.57% in October 2021 to register softer levels of 158.46% in October 2022, though it remains at a historical elevated level. Specifically, the cost of Housing and utilities, inclusive of water, electricity, gas and other fuels (grasping 28.4% of the CPI) added a yearly 74.40% by October 2022. Also, Owner-occupied rental costs increased by 6.69% year-on-year (YOY) and the prices of water, electricity, gas and other fuels followed a significant increase by 254.05% YOY as subsidies were removed by the Central Bank and prices went up sharply on the global market due to the war in Ukraine.

Food and non-alcoholic beverage (20% of CPI) prices surged by 203.21% yearly. In turn, the average prices of Transportation (13.1% of the CPI) and Health (7.7% of the CPI) recorded hikes of an annual 195.95% and 269.72% respectively by October 2022. Also, Restaurant and Hotels (2.8% of CPI) increased yearly by 189.66% by October 2022 as the hospitality sector had been authorized to adopt prices listed in dollars. In the same token, costs of Clothing and Footwear (5.2% of CPI) surged by 145.73% by October 2022, and the prices of Communication (4.5% of the CPI) increased by 228.04%. Finally, prices of Furnishings and household equipment (3.8% of CPI), Alcoholic beverages and tobacco (1.4% of CPI), and Recreation, amusement, and culture (2.4% of the CPI) increased by 147.20%, 152.34%, and 146.76%, respectively, by October 2022.

Interesting to note, the customs dollar will come into effect first of December which it is expected to fuel a massive increase in prices in Lebanese pounds in a context of an already high running inflation. On the other hand, at this stage, this measure would be coupled with Central Bank’s amendment for dollar’ withdrawing rate from 8,000 to 15,000 LBP thus enlarging the amount of money in circulation. This act could lead to further deterioration of the Lebanese dollar exchange rate if no monetary measures will be taken to prevent such a risk. (CAS, 24.11)

[Back to Table of Contents](#TOC)

* 1. Robust Tourism Activity for Lebanon in September

The tourism sector in Lebanon looks very different two years after being severely affected by shutdowns, travel restrictions and the social unrest erupted since end of 2019. In fact, tourism activity grew by 70% YOY in September 2022; in parallel the activity at Rafic Hariri International Airport improved remarkably in 2022, as the number of airport passengers added 55.56% YOY by September 2022. Data from the Ministry of Tourism showed that the number of incoming visitors witnessed an annual increase of 70% reaching 1,120,927 visitors by September 2022, compared to only 659,030 by September 2021. The breakdown of statistics reveals that the number of tourists from the top 3 destinations (Europe, Arab countries and North America) recorded considerable upticks.

Europeans grasped the lion’s share or 39.47% of total tourists. Travelers from the Arab countries came in second, grasping a share of 27% of the total while tourists from North America constituted 21.64% of total tourists. The number of European tourists rose by 54.3% year-on-year (YOY) to 442,392 by September 2022. Following, the number of tourists from Arab tourists and North America increased respectively by 71.96% and 74.04% to reach 302,566 and 242,566 by September 2022. Generally, the tourism sector in Lebanon used to assume a well-defined position in the region. Unfortunately, despite the rise in tourism activity in 2022, it remains below pre-pandemic levels, probably due to political instability. Nevertheless, Lebanon is hoping that the upcoming holiday season will increase the influx of tourists and visitors, thus help revive its flagging economy. (Ministry of Tourism 29.11)

[Back to Table of Contents](#TOC)

* 1. Jordan to Receive $845.1 Million Under Annual US Budget Support Grant Agreement

Jordanian Prime Minister Khasawneh signed the annual US grant agreement to support Jordan's budget, amounting to $845.1 million, between Ministry of Planning and International Cooperation and United States Agency for International Development (USAID), at the ministry's headquarters. The grant comes as part of the US economic assistance program to the Jordanian government, within the third memorandum of understanding (MoU) signed by the two sides for 2018-2022.

Speaking at the signing ceremony, Khasawneh stressed the "deep-rooted, strategic" partnership between the two friendly countries, noting the importance that Jordan attaches to developing its partnership with United States in various cooperation fields. The PM also expressed Jordan's appreciation for this US support, which expresses Washington's understanding of the bulk of challenges facing the Kingdom and its support for Amman's comprehensive modernization project.

The PM noted Jordan will continue to move forward in its comprehensive modernization project with its three political, economic and administrative tracks within the framework of the political system modernization, Economic Modernization Vision (EMV) and public sector modernization roadmap, led by King Abdullah II. (Petra 27.11)

[Back to Table of Contents](#TOC)

* 1. Jordan's Trade Deficit Rises by 32% in January-September 2022

Jordan's trade balance deficit in the January-September period of 2022 increased by 32.8%, hitting JD8.137 billion compared to JD6.125 billion in the same period of 2021. According to a monthly report issued by the Department of Statistics (DoS), total exports in the January-September period of 2022 reached JD6.7 billion, up by 42% compared to the JD4.7 billion recorded in the same period of 2021.

National exports in the same period of 2022 rose by 44%, reaching JD6.169 billion compared to JD4.283 billion in the same period of 2021, figures showed. The value of re-exports was at JD530.7 million, up by 21.6% compared to the JD436 million recorded during the same period of 2021. Imports also went up by 36.8%, reaching JD14.837 billion compared to the JD10.844 billion recorded in the same period of 2021.

On a monthly level, figures showed that total exports in September 2022 reached JD773.2 million, up by 30.7% compared to the figure reported during the same month of 2021. National exports in September 2022 rose by 33%, reaching JD714.8 million compared to the figure reported during the same month of 2021. The value of re-exports in September was at JD58.4 million, up by 7.9% compared to the figure reported during the same month of 2021. Imports also went up by 30.5%, reaching JD1.823 billion compared to the figure reported during the same month of 2021. According to the report, the trade balance deficit in September 2022 increased by 30.3%, amounting to JD1.05 billion compared to the figure reported during the same month of 2021. (Petra 27.11)

►►Arabian Gulf

[Back to Table of Contents](#TOC)

* 1. S&P Turns More Positive on Bahrain as Oil Prices Surge

On 25 November, Bahrain’s outlook was raised to positive by [S&P Global Ratings](http://www.standardandpoors.com/) on expectation the government will continue efforts to reduce its budget deficit and that it will benefit from high oil prices. The ratings agency revised the outlook from stable and affirmed its ‘B+/B’ long- and short-term foreign and local currency sovereign credit ratings on Bahrain.

Bahrain’s energy industry produces around 200,000 barrels of oil a day, compared with about 11 million barrels for Saudi Arabia and more than 3 million barrels for the UAE. The Gulf’s smallest economy said earlier this year it was hiring advisers to help sell stakes in some of its oil and gas assets amid efforts to open up an industry closed to foreign investments for decades.

Among the policies welcomed by the agency were expenditure cuts and a doubling of value-added taxes in January. Some of the benefits to Bahrain’s “relatively diverse” economy include its proximity to the large Saudi market, strong regulatory oversight of the financial sector and a low-cost environment, S&P said. It estimated Bahrain’s GDP per capita at about $27,300 for this year. The agency expects the country’s economy to expand 4.8% in 2022, before slowing to about 2.5% for the 2023-25 period amid gradually declining commodity prices. (S&P 25.11)

[Back to Table of Contents](#TOC)

* 1. Qatar Signs Deal to Sell Germany Natural Gas

State-owned QatarEnergy signed a deal with the US energy giant ConocoPhillips to supply Germany with about 2 billion cubic meters of liquefied natural gas per year. The agreement is for 15 years, but the first shipment will not take place until 2026. The gas will come from Qatar's North Field East and North Field South offshore gas fields, QatarEnergy said. North Field East is one of the biggest natural gas fields in the world. Per the agreement, a subsidiary of ConocoPhillips will purchase agreed-upon quantities of gas from Qatar and the gas will then be delivered to a German terminal.

Germany has been seeking a long-term gas deal with Qatar since the Russian invasion of Ukraine earlier this year. Germany depended on Russia for about a third of its natural gas and this has put them in a difficult position as a NATO member opposed to the invasion.

The amount of gas Qatar will provide Germany constitutes only a fraction of the 142 billion cubic meters the European country imported in 2021. However, the deal is important because it helps Germany diversify its energy sources. The agreement also represents the continued importance of Qatar's hydrocarbons in the world economy. Germany is also seeking a more comprehensive energy partnership with Gulf states in the future focused more on renewable energy. (Al-Monitor 30.11)

[Back to Table of Contents](#TOC)

* 1. UAE & Japan to Sign MoU on Establishing a Joint Business Council

The Federation of UAE Chambers of Commerce and Industry (FCCI) and Japan External Trade Organization in Dubai (JETRO Dubai) have agreed on creating a UAE-Japan business council to promote visits between the business communities in both countries. The two sides agreed on signing a MoU for setting up the proposed council by Q1/23. The formation of the council is aimed at developing joint projects and exchange expertise. This came during a meeting between the Secretary General of the FCCI, and the managing director of JETRO Dubai.

The UAE secured 40.1% of Japan’s crude oil needs in October this year, equaling 33.99 million barrels, according to the Agency for Natural Resources and Energy in Tokyo. The amount of crude that imported by the East Asian country during that month amounted to 84.58 million barrels, of which 80.10 million barrels, or 94.7%, originated from five Arab countries: UAE, Saudi Arabia, Kuwait, Qatar, Bahrain and Oman, which is part of the Japanese Ministry of Economy, Trade and Industry. (GB 05.12)

* 1. Abu Dhabi’s GDP Grows by 11.2% in the First Half of 2022

Abu Dhabi’s gross domestic product (GDP) in the first half of 2022 has grown 11.2%, compared to the same period last year. Meanwhile, the emirate’s quarterly GDP growth rate reached 11.7% during Q2, compared to the same quarter last year, according to estimates revealed by the Statistics Centre – Abu Dhabi (SCAD). The real GDP value (at constant prices) exceeded Dhs543 billion at the end of the year’s first half, while the value of the non-oil sectors’ GDP increased Dhs28.4 billion compared to the same period last year to reach Dhs273 billion in total.

Mining and quarrying activities (including crude oil and natural gas) contributed 49.7% to the emirate’s real GDP during H1/22. This translated into non-oil activities contributing 50.3% at constant prices to the GDP, defying global oil price increases during the same period.

All non-oil economic activities and sectors showed positive growth rates at constant prices during the first half of 2022, according to statistical estimates. Health and social work activity rose 29.9%, followed by accommodation and food services that grew at 29.3%. Professional, scientific and support services scaled 27.2%, wholesale and retail trade activity surged at 23.7%, real estate activities grew at a rate of 19.1%, and electricity, gas, water, and waste management climbed at 18%, followed by a 13.8% rise in transportation and storage.

Manufacturing activities at 8.1% led the list of economic activities that contributed to the emirate’s real GDP at constant prices during H1, following by construction and building activities that contributed 7.7%, while growing at 6.9%. This was followed by wholesale and retail trade activity that contributed 5.9%, and financial and insurance activities that contributed 5.5%. (GB 25.11).

[Back to Table of Contents](#TOC)

* 1. Saudi Arabia Launches $703 Million Island Tourism Plan

Saudi Arabia’s Crown Prince Mohammed announced a $703 million (SR2.64 billion) funding plan to develop Darin and Tarout Island. The development scheme will focus on heritage, environment and tourism and will work to enhance the quality of life of the island’s 120,000 residents. Projects will include development of Darin Castle and airport, building new hotels, introduction of hiking trails, the introduction of Saudi Arabia’s largest mangrove forest and several new culture festivals.

To shape the future of the 32sq km region Saudi Arabia has identified three main pillars for development: Preserving the cultural and historical heritage of the island, Revival of natural and environmental sites, and improving quality of life and enhancing its tourism economy. To achieve the goals of the island’s development plan, more than 19 qualitative initiatives have been developed.

On the cultural side, Darin Castle and airport will be developed as heritage tourist destinations, and holding several cultural and heritage festivals on the island, as well as establishing multiple pedestrian trails that pass through the island’s heritage areas. On the environmental side, the largest mangrove forest will be created on the shores of the Arabian Gulf, in addition to building several environmental hotels and motels in natural areas, as well as improving the quality of life on the island through the construction of roads, infrastructure and public parks, including many stadiums and modern sports facilities.

The accreditation of development approach is expected to yield a significant economic and social impact in the region by contributing to GDP with an average of up to $79 million at an annual basis, increasing the number of tourists to 1.36 million by 2030, and providing thousands of career opportunities, as well as allocating up to 48% of the island’s area to parks, waterfronts, roads and facilities. (AB 26.11)

[Back to Table of Contents](#TOC)

* 1. Saudi Space Commission Announces Launch of Saudi Space Accelerator Program

The [Saudi Space Commission](https://saudispace.gov.sa) announced the launch of its Saudi Space Accelerator Program in line with the Kingdom's vision of becoming a global hub of innovation by 2030. The program seeks to enhance the national Space sector through the development of its infrastructure and enabling local entrepreneurs and businesses to advance innovative Space solutions.

The Program addresses the current state in the Kingdom's Space sector and proposes proactive space solutions. Through the implementation of this program, the commission will ignite the local ecosystem and determine its maturity level, and to ensure that the sector remains viable for years to come, by providing an established business environment for growth and innovation for entrepreneurs to thrive in – overall improving the effectiveness of the commission's future programs and initiatives over the long-run.

The Saudi Space Accelerator Program is being supported by a greater initiative; The Future Office for Entrepreneurship Development, that seeks to establish a new business unit within the commission dedicated to enabling the entrepreneurial space scene in the Kingdom. It aims to assess the current state of the sector, adopt best global practices, and develop a roadmap for local businesses. As for the Saudi Space Accelerator Program, it focuses on providing support to both local and international startups, which will enhance the promising and emerging space sector in the Kingdom. Participating entrepreneurs and startups will be supported in aligning their projects with internationally recognized best practices to achieve the Kingdom's 2030 goals. (SSC 05.12)

►►North Africa

[Back to Table of Contents](#TOC)

* 1. Private-Sector Contraction Deepens Following Egyptian Pound Devaluation

The contraction in Egypt’s private sector deepened in November as the depreciation of the EGP triggered a surge in inflation, according to S&P Global’s purchasing managers’ index. The PMI index fell to 45.4 from 47.7 in October, falling further below the 50.0 threshold that separates growth from contraction to hit its lowest level since June.

Purchase price inflation rose at its fastest rate in more than four years, with more than 42% of businesses reporting an increase in overall costs. That is 3x higher than those who saw an increase in selling prices, suggesting that most firms were shouldering the burden of rising costs as demand continues to worsen.

Egyptian firms faced an immediate hit to demand from a rapid depreciation of the EGP since late October. The currency has tumbled 24.6% against the USD since late October when the central bank moved to a flexible exchange rate. This led to a marked increase in prices paid for raw materials, which have already been exacerbated by import restrictions since early-2022. Businesses suffered the worst falls in output and new orders since the height of the pandemic shock in May 2020. Outside of COVID-19, this was the most severe downturn since January 2017.

Firms also reported continuing supply disruptions amid ongoing import restrictions, which were exacerbated by the rising costs of raw materials on the back of the devaluation. This prompted companies to cut input buying levels and utilize existing stocks, slightly affecting inventory levels. The CBE is now in the process of rolling back the import curbs it put in place earlier this year, with plans to phase them out completely by the end of the year. (S&P 05.12)

[Back to Table of Contents](#TOC)

* 1. Cairo Approves Plans for IP Authority

Egyptian ministers approved a draft bill that would establish the Egyptian Intellectual Property Authority, a public body to regulate and protect intellectual property rights in the country. The authority is key to the government’s new five-year intellectual property strategy which was announced in September as part of broader efforts to improve business conditions, strengthen the private sector and boost innovation. The authority would be tasked with preparing and overseeing the implementation of the strategy, coordinating policy making, and raising awareness of IP rights among businesses and researchers. The authority is expected to launch in 2024. The Cabinet also approved legal amendments that would allow authorities to disconnect electricity, water and gas connections to buildings illegally built on agricultural or state land. (Enterprise 24.11)

[Back to Table of Contents](#TOC)

* 1. World Bank Forecasts Remittances to Egypt to Increase by 2.5% This Year

Remittances from Egyptians abroad are set to rise 2.5% this year, climbing to $32.3 billion from $31.5 billion in 2021, according to the World Bank’s latest forecast. The World Bank sees Egypt’s inflows benefiting from surging oil prices, which will increase transfers from Egyptian workers based in the Arabian Gulf.

In May, the World Bank predicted an 8% rise in remittances this year, but changes internationally, as well as local developments, have caused inflows to fall short of its forecast. Remittances have made only “weak advances” since Q3/21 on the back of surging inflation in advanced economies as well as the fiscal impact of food and fuel subsidies at home.

Egypt is forecast to be the fifth-largest recipient of remittances this year. India leads with $100 billion while Mexico, China, and the Philippines round out the top four. Inflows will rise by a slower pace in 2023, according to the Bank, which is forecasting 2% growth next year. It also sees remittances into MENA decelerating to 2% next year due to persistent adverse trends in the global environment and deeper financial difficulties in the region.

Remittance inflows are of critical importance in helping Egypt offset its external and fiscal shortfalls, the Bank said. Remittances have become an increasingly important source of hard currency for Egypt due to the economic shocks caused by COVID-19, the war in Ukraine and tightening financial conditions. Inflows recorded a fresh high for the second year in a row in FY 2021/2, climbing to $31.9 billion on rising oil prices boosting the transfers from the Gulf. (WB 04.12)

[Back to Table of Contents](#TOC)

* 1. The Central Bank of Egypt’s Financial Inclusion Drive

Egypt’s financial inclusion rate — the percentage of citizens above the age of 16 with a bank account, mobile wallet or pre-paid card — has grown 131% between 2016 and 2022, according to a Central Bank of Egypt report. Some 40 million adults (60.6%) in Egypt were banking by June of this year, up from 17.1 million in 2016, the report says. Some 3 million people entered the financial system in H1/22. More than 56% of Egyptian adults — nearly 37 million people — were banked at the end of 2021, up from almost 53% the year before, according to earlier figures from the CBE.

The CBE is doubling down on its plans to push financial inclusion through 2025 by amending legal and regulatory frameworks, driving growth in fintech and digital financial infrastructure, and ensuring the availability of sustainable finance and a stable economic environment. The report did not go into further detail on these “enablers” of the CBE’s financial inclusion strategy.

The four-pillar financial inclusion strategy was first launched in 2019 and focuses on consumer empowerment through raising awareness about financial inclusion and consumer rights, diversification in banking and non-banking financial products, supporting the MSME ecosystem, and expanding the use of fintech solutions, according to the report. (Enterprise 27.11)

[Back to Table of Contents](#TOC)

* 1. Egypt's Economy Grew by 4.4% in the First Quarter of 2022 Despite Headwinds

Egypt’s economy grew by 4.4% y-o-y in the first quarter of FY 2022/23, according to preliminary data from the Planning Ministry. GDP growth in the first quarter of the state’s current fiscal year (which starts in July) came despite continued global headwinds thanks to the pandemic, the war in Ukraine and climate change.

The Planning Ministry is now expecting the Egyptian economy to grow by around 5.0% in FY 2022/23. The draft budget for this fiscal year had estimated growth of 5.5%. The government’s 5% estimate is more optimistic than forecasts from some international institutions because it reflects the “resilience” that the economy has shown as a result of the growth generated by public investment. Last quarter’s 4.4% growth is in line with the International Monetary Fund’s most recent estimate for Egypt for the full fiscal year, while the World Bank in October predicted our economy to grow 4.8% in FY 2022-2023.

Prime Minister Madbouly discussed measures meant to achieve a balance between maintaining high growth and containing inflation. He also discussed how to protect jobs and reduce the country’s external debt burden. Urban inflation hit its highest level in four years in October, coming in at 16.2% on the back of surging food prices, while the external debt-to-GDP ratio stands at around 34.6%. (Enterprise 29.11)

[Back to Table of Contents](#TOC)

* 1. Egypt to Build City an Artificial Island to Protect Alexandria

During a meeting with President Abdel Fattah al-Sisi on 15 November, senior Egyptian officials discussed the establishment of the first-of-its-kind city called “New Abu Qir” on an artificial island off the coast of Alexandria in the Mediterranean. Preparations on the new city coincide with reports that the Nile Delta region is sinking amid rising sea levels due to climate change. According to the reports, the city of Alexandria is also threatened with disappearance by drowning or erosion.

The New Abu Qir city will be the first Egyptian city entirely built on an artificial island, extending over 1,400 acres in the sea, and include a series of high-rise towers. Plans also call for the largest commercial port on the Mediterranean. Experts and observers praised the plans, especially in the wake of the COP27. Egypt’s work on New Abu Qir is part of its efforts to protect Alexandria from drowning, erosion and soil salinity. A UN report warned of the devastating effects of climate change on coastal cities such as Alexandria. The establishment of a new city comes within the framework of the state’s moves to confront population growth through new economic and investment opportunities that improve the standard of living, create job opportunities and attract foreign investments. (Al-Monitor 27.11)

[Back to Table of Contents](#TOC)

* 1. Egyptian National Railways Gets $329 Million in Funding from EIB and AFD

Egyptian National Railways (ENR) and the French Development Agency (AFD) signed an implementation financing agreement for the upgrade of the Tanta – El Mansoura – Damietta rail line project with a total loan amount of €95 million. The project is co-financed with the European Investment Bank (EIB), EIB will also be giving the Egyptian National Railways a €221 million loan.

The rail line project involves doubling the track between El Mansoura and Damietta over 64 km and upgrading the signaling from Tanta to Damietta for a total distance of 119 km. The signaling upgrade includes the installation of signal lights, electronic interlocking, a centralized control center, and an automatic train protection system.

Earlier this year, World Bank approved a $400 million development financing agreement to improve the performance of the logistics and transportation sectors in Egypt and to support the shift towards low-carbon transportation along the Greater Cairo Area (GCA) railway corridor. (WAYA 27.11)

[Back to Table of Contents](#TOC)

* 1. Morocco’s Trade Deficit Surges to 56% Amid Ongoing Price Shocks

The upward trend in Morocco’s trade deficit is showing no signs of slowing down, reaching 56% at the end of October, continuing to weigh down on the country’s foreign currency reserves. The recent surge in the cost of imports can be directly attributed to rising energy and food prices as well as a consolidating dollar.

Over the first ten months of 2022, the value of the country’s imports rose to MAD 615 billion ($58 billion), up from MAD 426 billion ($ 40 billion) last year, a 44% increase in value according to recent data from Morocco’s foreign trade watchdog, Office d’Echange (OE). The growth in the cost of imports significantly outpaced the 36% growth in exports, contributing to the widening of Morocco’s trade deficit.

The value of exports totaled MAD 354 billion ($33.4 billion) at the end of October 2022, up from MAD 259 billion ($24.2 billion) the previous year. While the volume of Morocco’s energy imports remained largely stable, growing from 5.6 billion tonnes in October 2021 to 6.2 billion tonnes a year later, the monetary value of imports more than doubled, going from MAD 59 billion ($5.5 billion) in 2021 to MAD 128 billion ($12 billion) a year later.

The prices of imported food commodities have also surged year on year. OE data suggests that the value of food imports went from MAD 73 billion ($6.8 billion) for all of 2021, while at the end of October 2022 Morocco already imported MAD 47 billion ($4.4 billion) worth of food products. (MWN 03.12)

[Back to Table of Contents](#TOC)

* 1. Morocco Ranks Second in the Africa Industrialization Index

Morocco ranked second in the Africa Industrialization Index, behind South Africa, thanks to its growing manufacturing and export operations. Morocco scored 0.83 in the index, marking a slight decline compared to 2020. Despite the score drop, Rabat succeeded in securing the second position after a decline in Tunisia’s ranking from second in 2010 to fourth in 2021. Meanwhile, South Africa maintained the top position over the past decade, scoring 0.84 in 2021, down from 0.89 in 2010.

Morocco’s strong performance in exports has allowed the country to become the second largest exporter of manufacturers on the continent after South Africa. The country now accounts for 21.1% of Africa’s total manufacturing exports, outperforming direct competitors like Tunisia and Egypt. Morocco’s growing manufacturing capacity and export volumes of electrical distribution equipment, automotive, fertilizers, and women’s garments to Europe, the United States and Brazil helped Rabat secure the second position in the sub-index of performance with a score of 0.8, behind South Africa who scored 0.82.

Egypt, Tunisia, and Eswatini followed among the top five performing African countries, ahead of Mauritius, Equatorial Guinea and Democratic Republic of Congo. In addition to the assessment of economic performance, the index evaluated direct determinants like labor and capital, as well as indirect determinants like macroeconomic stability and existing infrastructure. As Africa moves towards more integrated regional ecosystems with the implementation of the African Continental Free Trade Area, the continent is expected to enhance industrialization efforts. (MWN 25.11)

TURKISH, CYPRIOT & GREEK DEVELOPMENTS

[Back to Table of Contents](#TOC)

* 1. Turkish Government Banks on Gulf Financial Support to Save Economy

Turkey’s government is on a quest to secure new foreign exchange inflows from such countries as Saudi Arabia and Qatar, as international observers warn that a fresh currency crisis could be inevitable for the country. With crucial elections looming in June, such inflows are important to prop up the embattled Turkish lira and avert another whirlwind of price hikes, but how much those efforts could help remains open to question.

A hard currency shortfall is at the core of Turkey’s economic turmoil, and with foreign investors staying away, the government has had to use diplomatic channels to secure billions of dollars in foreign funds to ease the crunch — an effort that is likely to continue until the elections. The funds have been used to funnel hard currency to the market and manage expectations in a bid to control exchange rates, which are crucial for an economy that is heavily reliant on imports, including energy. The lira has lost more than half of its value against the dollar since September 2021, when the central bank embarked on unorthodox rate cuts at the behest of President Erdogan.

Turkey’s external debt maturing over the next 12 months amounts to some $185 billion, while its current account deficit reached $38 billion in the first eight months. Both problems are seen as hard to surmount. Also, Turkey’s risk premium — reflected in credit default swaps that determine the cost of insuring exposure to a country’s sovereign debt — has largely decoupled from those of peer countries, hovering between 500 and 600 basis points. This leads many to conclude that the country will struggle to borrow from foreign markets. The downturn in foreign direct and portfolio investments compounds the view that great trouble is looming for Turkey in securing the foreign currency it needs. So, the argument goes, growing pressure on the lira and a fresh price storm are inevitable.

Such arguments, however, fail to adequately reflect how Erdogan’s government has turned up the pressure on companies and banks in a bid to curb dollarization and used non-economic channels to secure foreign funds.

Having recently reconciled with Turkey after years of bad blood, Saudi Arabia is now set to assist Turkey financially. The kingdom is in the “final” stage of talks to deposit $5 billion in Turkey’s central bank. Talks are also in final stages for Qatar to extend up to $10 billion in funding to Turkey, a close ally, including up to $3 billion by the end of the year. In January, Azerbaijan’s state oil fund SOFAZ said it had placed a six-month deposit of €1 billion with Turkey's central bank as a line of support for the country’s financial stability. It later extended the deposit to the year-end. (Al-Monitor 30.11)

GENERAL NEWS AND INTEREST

\*ISRAEL:

[Back to Table of Contents](#TOC)

* 1. Hanukkah Holiday to be Celebrated Starting on 18 December

Israel and the Jewish world will celebrate the Hanukkah holiday, which begins this year on the evening of Sunday, 18 December and end on the evening of Monday, 6 December. Hanukkah, which is Hebrew for “dedication,” is the festival commemorating the rededication of the Second Temple in Jerusalem at the time of the Maccabean Revolt against the Seleucid Empire. It is also known as the Festival of Lights.

Hanukkah is observed for eight nights and days, starting on the 25th day of Kislev according to the Hebrew calendar, by lighting the candles of a candelabrum with nine branches, called a *hanukkiah*. One branch is typically placed above or below the others and its candle is used to light the other eight candles. This unique utilitarian candle is called the *shamash*. Each night, one additional candle is lit by the *shamash* until all eight candles are lit together on the final night of the festival. The miracle of Hanukkah is the military victory of the Seleucids. Some also consider that the miracle occurred when only one vial of sacred oil was found in the Temple. It held just enough oil to illuminate the Temple lamp for one day, and yet it lasted for eight full days.

Even though work is allowed on the holiday (unlike the Sabbath, Rosh HaShanah or Passover), many will leave work early to light the Hanukkah lights with family and friends at nightfall. Many special foods made with oil are consumed, such as potato pancakes and jelly donuts.

[Back to Table of Contents](#TOC)

* 1. Google Invests More Than $15 Million in Israeli High-Tech Training

Google and Israel's Reichman University plan to establish a school for high-tech professions which will provide equal opportunity and promote underrepresented populations. In the new program, underrepresented populations such as women, ultra-Orthodox Jews, Arabs, the Ethiopian community and the geo-social periphery will receive scholarships to join the program regardless of their ability to pay tuition.

Israel’s high-tech sector has suffered from a severe employee shortage for many years. At the end of 2021, the shortage was estimated to be about 18,000 people, up from 11,000 the previous year. According to Israel’s Innovation Authority annual report last May, the total number of workers in Israel’s high-tech industry reached about 400,000, representing around 10% of all employees. Despite the global crisis, which clearly affects also Israel’s high-tech industry, vacant positions accounted for more than 7%.

Looking beyond the current crisis, the Israeli government and senior figures in the high-tech sector push to enlarge high-tech training programs, both academic and not. On 11 September, the Cabinet adopted the interim findings of the Perlmutter Committee, dedicated to human capital in high tech. Based on the interim findings, the Cabinet approved a national plan to increase and develop human capital in high tech, with emphasis on populations that are not currently represented in the industry. For the short term, it aims to reach 545,000 people in Israel working in high tech by 2026. In the long term, the committee would like that number to reach 690,000-770,000.

The committee called to open more faculties for high-tech-related studies, and for universities to prepare for growth in the number of students in the coming years. But it also called to set up more nonacademic training courses. The new Reichman training program offers students academic-level training but not in the framework of a usual three-year-long undergraduate program. The students receive academic credits that can be used later on toward a degree, combined with assistance for job hunting. (Al-Monitor 21.11)

[Back to Table of Contents](#TOC)

* 1. Report Shows Rise in Obesity & Smoking Among Israelis

A new report by Israel's National Program for Quality Indicators published shows a significant increase in obesity rates and smoking among Israelis. According to the survey, nearly 59% of the country’s population aged between 20 and 64 is overweight. Among Israelis over the age of 65, about 40% of men and 30% of women are also suffering from obesity, which could lead to serious chronic diseases. Part of the problem was the lifestyle that many Israelis got accustomed to during the COVID pandemic.

The report also showed an alarming increase in the number of smokers in Israel. Some 20.1% of Israelis aged 16-74 smoke, compared to 19.6% in 2019. The report emphasized the increase in mental issues and anxiety among the youth, which also leads to eating disorders. The pundits encourage parents to listen to their children and to support them as many have experienced “extreme loneliness” during the pandemic and need help getting back into “social situations.” (i24NEWS 22.11)

\*REGIONAL:

[Back to Table of Contents](#TOC)

* 1. UAE Announces List of Public Holidays for 2023

The UAE has announced official holidays for public and private sectors for the year 2023. According to the UAE cabinet, the list of approved holidays is as follows:

* New Year: 1 January
* Eid Al Fitr: Ramadan 29 to Shawwal 3 (Gregorian dates depend on the sightings of the moon)
* Day of Arafat: Zul Hijjah 9 (Gregorian dates depend on the sightings of the moon)
* Eid Al Adha: Zul Hijjah 10-12 (Gregorian dates depend on the sightings of the moon)
* Islamic New Year: 21 July
* Prophet Mohammed’s birthday: 29 September
* National Day: 2 & 3 December (WAM 29.11)

[Back to Table of Contents](#TOC)

* 1. Saudi Arabia Announces Public Holiday after Historic FIFA World Cup Win

A public holiday was declared on 23 November across Saudi Arabia, in the wake of its historic win over Argentina in the ongoing FIFA World Cup. King Salman bin Abdulaziz Al Saud directed to approve the proposal by Saudi Crown Prince and Prime Minister Mohammed bin Salman to announce a holiday. Private and public sector employees as well as all students across Saudi Arabia enjoyed the day off. Held at the Lusail Stadium, Saudi Arabia stunned Argentina in a 2-1 win, to mark an unprecedented entry into the football tournament. (GB 22.11)

[Back to Table of Contents](#TOC)

* 1. Jeddah to Open Saudi Arabia's First Independent Cinema

The first independent cinema opened in Jeddah, Saudi Arabia, on 6 December. Located in the Hayy Jameel district, its main objective is to serve as a meeting point between citizens. It includes a 168 seat main hall, a 30 seat community screening room, a media library and an educational exhibits space. The cinema's founders have claimed that it will celebrate the legends of the golden age of Arab cinema. Among the first screenings will be a retrospective of five versions of groundbreaking films by Egyptian Youssef Chahine, one of the region's renowned filmmakers.

The cinema will also present an exhibition highlighting the contribution of the famous photographer Gamal Fahmy to the influence of cinema in the region. This new cinema especially invites the public to learn more about the historical influence that the independent film industry has had on social and political trends. (i24NEWS 01.12)

[Back to Table of Contents](#TOC)

* 1. Sudan's Transition Deal Seen as Significant, But Doubts Remain

On 5 December, the Sudanese military and pro-democracy actors came to an agreement on Monday to potentially end the political gridlock in the country following last year's coup. Sudan's military leader Gen. Abdel Fattah al-Burhan signed the agreement with the Forces for the Declaration of Freedom and Change, a coalition of pro-democracy groups advocating for a civilian transition.

The deal stipulates that the military, which has been ruling the country since 2021, will join a security and defense council under a new prime minister. However, the document did not set a date for a final agreement, nor did it specify military reforms, and it is opposed by some protest groups, according to multiple reports.

Sudan has been in political turmoil since 2019, when longtime ruler Omar al-Bashir was deposed in a military coup. A committee composed of a wide array of political actors as well as military officials then assumed the role of head of state via the Sovereignty Council, while civilian Abdulla Hamdok became prime minister. However, Burhan then ousted Hamdok and the council in another coup last year.

The 2021 coup led to a major political crisis in Sudan. Burhan promised to quickly appoint a cabinet after the coup and lead the country to elections in 2023, but he did not deliver on it. The economy has also collapsed under his rule and violence is on the rise.

Sudan’s allies are somewhat optimistic about the agreement, at least officially. The United States, Saudi Arabia, the UAE, UK and Norway released a joint statement praising the agreement. (Al-Monitor 06.12)

ISRAEL LIFE SCIENCE NEWS

[Back to Table of Contents](#TOC)

* 1. Debiopharm Leads $6 Million Round for YonaLink to Scale Global Growth

Debiopharm Innovation Fund, the strategic investment arm of Swiss biopharmaceutical company Debiopharm, and YonaLink announced that they have completed an initial funding round, raising $6 million, to scale global growth and expand YonaLink’s EHR-to-EDC integration platform. Purpose-built to stream and map up-to-date patient data, in real time, YonaLink’s SaaS solution exports patient data directly from a clinical site’s EHR system and transfers it into clinical research electronic data capture (EDC) systems.

Debiopharm Innovation Fund in Switzerland led the round. Co-funded by the European Union, the round also included Israel’s eHealth Ventures. The total $6 million investment will be used to bring more talent to the company’s growing team, expand the YonaLink platform’s capabilities, and drive its adoption among clinical trial sponsors and their clinical research organization (CRO) partners.

YonaLink’s platform has the capabilities to stream up-to-date data from any clinical site’s EHR system, in any part of the world, and populate it within YonaLink’s next generation EDC or other data capture systems. With built-in eConsent and ePRO / eCOA and streaming EHR-to-EDC capabilities, YonaLink’s next generation EDC provides a comprehensive solution for today’s clinical trial needs, bringing EDC and eSource functionality together in a single tool.

Jerusalem's [YonaLink](http://www.yonalink.com) equips research teams with the ability to extract up-to-date patient data from an EHR and stream that data into a clinical trial electronic data capture (EDC) system in real time, reducing clinical trial timelines and costs. YonaLink is bringing new levels of speed, quality, and efficiency to clinical trial operations across the globe, simplifying the complexity of clinical data collection and validation, and enabling true scalability. The Company’s SaaS platform has the capabilities to stream up-to-date data from any clinical site’s EHR platform, in any part of the world, and populate it within YonaLink’s next generation EDC or other data capture systems. (Debiopharm 09.11)

[Back to Table of Contents](#TOC)

* 1. Enlivex Receives Allocetra Clearance from FDA for Treatment of Solid Malignancies

Enlivex Therapeutics announced that the U.S. FDA has cleared an Investigational New Drug (IND) application to study Allocetra in patients with advanced solid malignancies. The FDA’s Phase I/II clearance follows a recent announcement by the Company that the first patient has been dosed in a Phase I/II multi-center clinical trial in Israel designed to evaluate the safety, tolerability and preliminary efficacy of Allocetra stand-alone, and in combination with a PD1 checkpoint inhibitor, in patients with advanced solid tumors.

Allocetra is being developed as a universal, off-the-shelf cell therapy designed to reprogram macrophages into their homeostatic state. Diseases such as solid cancers, sepsis, and many others reprogram macrophages out of their homeostatic state. These non-homeostatic macrophages contribute significantly to the severity of the respective diseases. By restoring macrophage homeostasis, Allocetra has the potential to provide a novel immunotherapeutic mechanism of action for life-threatening clinical indications that are defined as "unmet medical needs", as a stand-alone therapy or in combination with leading therapeutic agents.

Ness Ziona's [Enlivex](http://www.enlivex.com) is a clinical stage macrophage reprogramming immunotherapy company developing Allocetra, a universal, off-the-shelf cell therapy designed to reprogram macrophages into their homeostatic state. Resetting non-homeostatic macrophages into their homeostatic state is critical for immune system rebalancing and resolution of life-threatening conditions. (Enlivex Therapeutics 28.11)

[Back to Table of Contents](#TOC)

* 1. ChickP Raises Dairy-Free Ice Cream to New Heights

ChickP Protein introduced chickpea protein isolate for plant-based ice cream. Protein from this ancient crop zeroes in on the non-dairy category to make a tasty plant-based frozen dessert with a creamy mouthfeel just like dairy ice cream.

ChickP developed a prototype of plant-based ice cream with its protein isolate in co-operation with Vaniglia, a premium international ice cream chain headquartered in Israel. Vaniglia advocates traditional methods for making ice cream, collecting fresh produce, and using 100% natural ingredients without artificial colors or preservatives. When developing an ice cream application, ChickP's protein isolate provides important functionalities, such as emulsion stability, prevention of icing and crystallization, and the creation of an ideal melting profile. These constitute the key parameters for maintaining a frozen dessert's indulgent properties throughout its shelf life. It also provides exceptional whipping capabilities, with a neutral fresh taste suitable for merging any desired flavor.

Founded in 2016, Rehovot's [ChickP](http://www.chickp-protein.com) is the owner of a breakthrough patented technology for production of chickpea protein isolate (90%), developed at the Hebrew University of Jerusalem. ChickP helps its customers to develop nutritional, plant-based products with speed-to-market and reliability. The start-up raised $10 million so far in a completed A round fundraising. ChickP is ISO-certified and has self-affirmed GRAS status. (ChickP 29.11)

[Back to Table of Contents](#TOC)

* 1. BiondVax Successful In Vivo Study of Its Inhaled COVID-19 NanoAb Therapy

BiondVax Pharmaceuticals announced statistically significant (p<0.001) efficacy results in a preclinical in vivo proof-of-concept study of its innovative inhaled nanosized antibody (NanoAb) COVID-19 therapy. Using an industry-standard animal model for COVID-19 therapeutics and vaccines, the study compared weight loss in two groups of hamsters after infection with SARS-COV-2. The first (experimental) group was treated with BiondVax’s anti-COVID-19 NanoAb, administered via inhalation, starting one day after being infected, while the second (control) group was treated in the same manner but with saline serving as a placebo. The study was conducted by two world renowned institutions: The Fraunhofer Institute for Toxicology and Experimental Medicine (ITEM) and The University of Veterinary Medicine Hannover (TiHo), Germany.

Compared to their weight immediately prior to infection, the control group’s weight declined on average 12.01%, while the weight of the experimental group, which was administered BiondVax’s NanoAb through inhalation, declined on average only 3.80%, a highly statistically significant result (p<0.001). The successful result was further supported by eight other tracked parameters, including heart rate and social behaviors that indicated the group treated with inhaled NanoAbs experienced a milder and shorter illness.

Ness Ziona's [BiondVax Pharmaceuticals](http://www.biondvax.com) is a biotechnology company focused on developing, manufacturing, and commercializing innovative immunotherapeutic products primarily for the treatment of infectious and autoimmune diseases. With highly experienced pharmaceutical industry leadership, BiondVax is aiming to develop a pipeline of diversified and commercially viable products and platforms beginning with an innovative nanosized antibody (NanoAb) pipeline. (BiondVax 29.11)

[Back to Table of Contents](#TOC)

* 1. BeeHero Raises $42 Million

BeeHero completed a $42 million Series B funding round. Lead investor Convent Capital was joined by General Mills, Cibus Capital (formerly ADM Capital), Rabobank, MS&AD, Firstime, J-Ventures, Plug&Play, iAngels, Gaingels, UpWest, and more. To date, BeeHero has raised $64 million. This new round of funding will enable BeeHero to further invest in R&D and help generate more data and insight into the sustainable agriculture ecosystem it is building to address the issue of global food security.

BeeHero uses advanced data analytics, artificial intelligence, and low-cost IoT sensors to bring transparency and efficiency to the complex logistics of commercial crop pollination. BeeHero's Precision-Pollination-as-a-Service aims to provide better crop yields and increased profits for commercial crop growers and agribusiness stakeholders.

Israeli precision pollination company BeeHero announced the completion of an oversubscribed $42 million Series B financing round led by Convent Capital. Also participating in the round were General Mills, Cibus Capital (formerly ADM Capital), Rabobank, MS&AD, Firstime, J-Ventures, Plug&Play, iAngels, Gaingels, UpWest, and more. This brings to $64 million the total amount raised by BeeHero. With close to 100,000 acres of high-value crops pollinated with BeeHero’s Precision Pollination as a Service, BeeHero now serves growers, beekeepers, agronomists and agro retailers across the US. The company is expanding into Australia, Europe, South Africa and South America.

Tel Aviv's [BeeHero](http://www.beehero.io) maximizes crop yields through precision pollination, combining sophisticated machine learning algorithms with low-cost sensors to stimulate full output potential during peak pollination cycles. By tracking and optimizing pollination in real-time, BeeHero ensures hyper-efficient pollinators that can increase crop yields by 30% on average. BeeHero’s platform already enables commercial growers to optimize crop-yield for 70% of major commercial crops. (BeeHero 01.12)

[Back to Table of Contents](#TOC)

* 1. Lumen Raises $62 Million in a Series B Financing Round

Israel metabolic health company Lumen has completed a $62 million Series B financing round led by Pitango Venture Capital with participation from Disruptive VC, Unorthodox Ventures, Hanwha Group, Resolute Ventures, RiverPark Ventures and Almeda Ventures.

The Tel Aviv-based company has developed the first handheld device to measure the metabolism through the breath. The number of people using Lumen to improve their metabolic health has grown exponentially since the product’s launch. Today more than 2 million monthly metabolic measurements are conducted with the Lumen handheld device. Traditionally, this process was only available in hospitals and clinics using a 45-minute expensive lab test. Lumen also provides daily personalized nutrition and lifestyle guidance to each person based on their metabolic profile.

Over the past year Lumen has conducted research studies in several health fields with top academic institutions, including Purdue University’s Whistler Center for Carbohydrate Research, University of Toronto’s Faculty of Kinesiology and Physical Education and ARU Cambridge. In October 2022, a study was carried out in collaboration with the endocrinology department at the Tel Aviv Sourasky Medical Center and was published in the Obesity Facts journal. The study’s findings revealed how metabolism based nutrition can reverse prediabetes conditions.

[Lumen](https://www.lumen.me/%20%E2%80%8E)’s mission is to create a world where every person has access to personalized nutrition and is empowered to improve their health through the world’s most cutting edge technology in the field. Lumen is developing new methods of measuring and tracking metabolism in real-time. (Globes 01.12)

[Back to Table of Contents](#TOC)

* 1. Nectin Therapeutics Raises $25 Million in Series A Financing

Nectin Therapeutics completed a $25 million Series A financing round led by IBF and Peregrine Ventures, with participation from aMoon Fund and other existing investors. Jerusalem based Nectin is developing novel targeted immunotherapies to address resistance to approved immuno-oncology treatments. The company also announced today dosing of the first patient in its Phase I clinical trial of NTX1088, the company's first-in-class PVR (CD155) blocker, in cancer patients with locally advanced and metastatic solid tumors. The trial is being conducted at The University of Texas MD Anderson Cancer Center (MD Anderson) with an investment from the Cancer Focus Fund, LP. The trial will include up to 90 patients treated with NTX1088 as a monotherapy and in combination with a PD-1 blocker.

The Series A funding will be used to support the ongoing clinical evaluation of NTX1088, and to further advance the company's pipeline of targeted immunotherapies and Antibody Drug Conjugates (ADCs). NTX1088 is a first-in-class high-affinity monoclonal antibody directed against PVR, a transmembrane protein expressed on cancer cells and associated with resistance to PD-1 and PD-L1 immune checkpoint inhibitors.

Jerusalem's [Nectin Therapeutics](https://www.nectintx.com/%E2%80%8E) is a biotechnology company devoted to transforming the lives of cancer patients by pioneering the development of next generation immune oncology (IO) therapies. (Nectin 01.12)

[Back to Table of Contents](#TOC)

* 1. ICL Pioneers Sustainable Citrus Fruit Preservation with FruitMag

ICL announced the launch of FruitMag, a sustainable and superior solution for post-harvest citrus fruit treatment. This innovative offering is mineral-based and fungicide free, unlike the products currently used by the global citrus fruit industry. By using a food-grade magnesia product, ICL is able to eliminate toxic materials and reduce product losses, while increasing shelf life.

FruitMag was put through rigorous testing, through a collaboration with the Volcani Institute (Agricultural Research Organization ARO), the research arm of the Israeli Ministry of Agriculture. A senior research scientist leading the Department of Postharvest Science – and an expert in the development and application of alternative methods for the control of postharvest diseases – worked with ICL to validate the performance of FruitMag.

Tel Aviv's [ICL Group](http://www.icl-group.com) is a leading global specialty minerals company, which creates impactful solutions for humanity's sustainability challenges in the food, agriculture and industrial markets. ICL leverages its unique bromine, potash and phosphate resources, its global workforce, and its sustainability focused R&D and technological innovation capabilities, to drive the company's growth across its end markets. (ICL 02.12)

ISRAEL PRODUCT & TECHNOLOGY NEWS

[Back to Table of Contents](#TOC)

* 1. Seraphic Named Gold Winner in 2022 ‘ASTORS’ Homeland Security Awards

Seraphic Security has been named a Gold Winner in the 2022 ‘ASTORS’ Homeland Security Awards from American Security Today for its innovation in Cyber Security Risk Management. Now in its seventh year, American Security Today’s annual ‘ASTORS’ Awards is the preeminent U.S. Homeland Security Awards Program that continues to recognize industry leaders of Physical and Border Security, Cybersecurity, Emergency Preparedness - Management and Response, Law Enforcement and First Responders.

Seraphic differentiates itself from other browser security solutions on the market with proprietary technology that enables it to stop zero-day, spear phishing, and other web-based attacks that others cannot, as well as prevention of corporate sensitive data loss. While browser security is addressed by many cyber defense products and categories, existing solutions fail to provide sufficient security and corporate policy enforcement that is necessary considering the new ways organizations are working. The solution works across any browser on any device – both managed and unmanaged, as well as on- and off-premises – ensuring safe browsing and corporate governance across public sites and corporate applications, whether they are SaaS or internal.

Herzliya's [Seraphic Security](http://www.seraphicsecurity.com) offers a unique security solution enabling enterprise-grade browser security on any browser on any device, providing seamless protection to both employees and enterprise assets, while providing security teams with advanced governance and policy enforcement. The Seraphic solution is easy to deploy, has no impact on performance, leaves user experience untouched, and is fully compatible with all browsers, all operating systems, and all devices (including Android and iOS mobile devices). (Seraphic Security 23.11)

[Back to Table of Contents](#TOC)

* 1. NanoLock Brings Built-in Meter-Level Cybersecurity to Renesas Customers

NanoLock Security announced built-in, zero-trust meter-level cyber security protection for Renesas Electronics Corp. customers' smart meter products. As the global energy economy worsens and cyberthreats like energy fraud and theft grow more frequent, Renesas' customers in meter manufacturing will now have NanoLock Security's DLMS compatible, zero-trust cyber protection built-in to their meters with no impact on performance, functionality, or deployment speed, giving them a significant competitive advantage.

This new solution gives Renesas' customers, renowned smart meter manufacturers, the ability to quickly build a product that is secure from all attack vectors, including insider manipulation and human error, without any disruptions to meter operations or product time to market.

Hod HaSharon's [NanoLock Security](http://www.nanolocksecurity.com) protects the operational integrity of connected devices, smart meters, and machines against cyber events and human error to maintain business continuity, improve safety and safeguard revenues. Trusted by critical infrastructure customers, such as utilities, industrial and manufacturing companies, NanoLock Security protects power generation and energy management, industrial, water and wastewater plants, as well as food & beverage manufacturing, while ensuring compliance with international security standards and guidelines. (NanoLock 28.11)

[Back to Table of Contents](#TOC)

* 1. Logz.io Unveils Open 360 Platform for Optimal Observability

Logz.io announced the introduction of its new Open 360 platform at AWS re:Invent 2022. With the launch of Open 360, Logz.io delivers numerous innovations that measurably reduce the complexity of cloud applications monitoring and troubleshooting, while optimizing related resources. Open 360 addresses the most significant and pervasive challenges faced by today’s observability teams - the inability to efficiently monitor complex applications while controlling related data volumes and costs. By directly targeting the requirement to process huge volumes of available data to gain insight into popular systems such as Kubernetes - Open 360 is purpose-built to help observability teams focus on, and pay for, only the most critical data.

Open 360 introduces new capabilities ranging from centralized, cross-stack Kubernetes observability to an expanded data collection agent, representing a significant step forward in the delivery of full stack observability that provides rapid time to value, at any scale. Along with additional capabilities designed to help customers continuously optimize their observability data volumes and reduce related overhead, the introduction of Open 360 marks a huge step forward for Logz.io, its customers and every organization seeking to tap into the power of the world’s most popular open source monitoring tools.

Tel Aviv's [Logz.io](https://logz.io) helps cloud-native businesses monitor and secure their environment. Their Open 360 Platform turns observability from a high-cost, low-value burden to a high-value, cost-efficient enabler of better business outcomes by combining and extending familiar, powerful and relevant Open Source capabilities across Logs, Metrics and Traces - complemented by security monitoring in the form of cloud-based SIEM. Now developers and engineers can employ an end-to-end, cloud-native observability stack built on scalable and easy-to-use Open Source using a single UI and unified agent - at a cost that anyone can afford. (Logz.io 29.11)

[Back to Table of Contents](#TOC)

* 1. BBT.live Accelerates Secure Access with NVIDIA BlueField DPU Platforms

BBT.live, the startup that has developed an all-in-one, tech-agnostic, software-defined connectivity solution, announced a new technology innovation powered by NVIDIA. As a result, BBT.live, the software-defined connectivity platform, will run on NVIDIA BlueField data processing units (DPUs) to unlock the benefits of cloud-based connectivity solutions to businesses at every scale.

BBT.live's proprietary technology, recognized by the Israel Innovation Authority, is device agnostic. It integrates with a variety of different hardware platforms (uCPE) without the need for time-consuming customization. BBT.live's software-defined connectivity platform can be installed on NVIDIA BlueField, bringing additional networking functionality to computer and server manufacturers (OEMs) and their customers. Deploying BBT.live's software-defined connectivity capabilities on NVIDIA BlueField DPUs will ensure immediate access to the latest secure connectivity technology. The solution will enable full isolation of the network control and forwarding planes, aiming to simplify and improve network control and automation.

Tel Aviv's [BBT.live](http://www.bbt.live) offers enterprise-grade software-defined connectivity solutions that enable businesses and organizations to enjoy seamless network connectivity. By combining security with network functionality in the cloud, BBT.live offers lean SASE architecture designed for simplicity, security, and top application performance. (BBT.Live 29.11)

[Back to Table of Contents](#TOC)

* 1. Leading Israeli Bank Selects MazeBolt RADAR Testing to Identify DDoS Vulnerabilities

MazeBolt Technologies, the creators of RADAR testing, the only solution that enables organizations to see their DDoS vulnerabilities, announced that another global bank, this time in Israel, has selected MazeBolt for continuous DDoS testing across their entire dynamic attack surface. This leading Israeli bank joins the ranks of other top-tier Israeli organizations, such as Payoneer, Gov, and Clal, as well as financial institutions across the EU, who have completely transformed their DDoS security readiness.

By implementing MazeBolt's powerful RADAR testing into its production environment, for the first time, the bank's cybersecurity team will be able to easily identify up to thousands of hidden vulnerabilities within their organizational assets, continuously and with zero operational downtime. MazeBolt works closely with their client's mitigation vendor to guide the closing of the DDoS remediation loop by providing exclusive insights into their unknown vulnerabilities while ensuring that the remediation patching was done correctly.

Ramat Gan's [MazeBolt](http://www.mazebolt.com) is pioneering a new standard in testing DDoS vulnerabilities that provides enterprises with full attack surface coverage. Its solution, RADAR testing, continuously observes tens of thousands of potential DDoS attack entry points, identifying how attackers can succeed in bypassing existing mitigation systems. The solution's autonomous risk detection allows cybersecurity teams to go beyond traditional DDoS testing by continuously detecting, analyzing, and prioritizing remediation across the network with zero operational downtime. (MazeBolt 29.11)

[Back to Table of Contents](#TOC)

* 1. Comlabs Selects Gilat for US Government Critical Communications Requirements

Gilat Satellite Networks announced that the company’s products and technology were selected by Comlabs Government Systems, a US-based systems integrator, as a service upgrade to their existing satellite network of several hundred government and nuclear sites throughout the US. Two Gilat SkyEdge II-c hubs and hundreds of fixed and mobile VSATs will be deployed to upgrade the satellite connectivity requirements of Comlab’s customer base of US government and nuclear facility customers. Comlabs’ proprietary technology offers “Hyper Critical Availability” connectivity to emergency managers, supporting reliable dissemination of alert and warning information to the public.

Comlabs Government Systems is a trusted provider of design and engineering services, managed network solutions, and equipment for public and private sector communications, alert and warning, and emergency response. The company’s strong commitment to product development, quality workmanship, and technical support has solidified its status as a respected market leader for the past 35 years.

Petah Tikva's [Gilat Satellite Networks](http://www.gilat.com) is a leading global provider of satellite-based broadband communications. With over 30 years of experience, they create and deliver deep technology solutions for satellite, ground and new space connectivity and provide comprehensive end-to-end solutions and services, powered by our innovative technology. They believe in the right of all people to be connected and are united in our resolution to provide communication solutions to all reaches of the world. Gilat’s comprehensive solutions support multiple applications with a full portfolio of products to address key applications including broadband access, mobility, cellular backhaul, military, government, and enterprise, all while meeting the most stringent service level requirements. (Gilat 29.11)

[Back to Table of Contents](#TOC)

* 1. Elbit Systems’ Simulation Infrastructure Becomes Cloud Native

Elbit Systems transformed its OneSim simulation software infrastructure to be cloud native, and its services can now be delivered to authorized users from a Microsoft Azure cloud. Working closely with Microsoft engineers, Elbit Systems redesigned the architecture of the OneSim infrastructure to meet the requirements of cloud solutions and upload the OneSim to the Microsoft Azure cloud.

OneSim is Elbit Systems’ platform-agnostic simulation software infrastructure that provides land, air and marine users a complete solution for training systems, from a stand-alone simulator and up to multi-platform Mission Training Centers. Beyond the significant operational advantages the cloud native OneSim simulation infrastructure also greatly improves efficiency as it enables to simplify updates, upgrades and maintenance activities.

Haifa's [Elbit Systems](https://elbitsystems.com) is an international high technology company engaged in a wide range of programs throughout the world, primarily in the defense and homeland security arenas. They develop and supply a broad portfolio of airborne, land and naval systems and products for defense, homeland security and commercial applications. Their systems and products are installed on new platforms, and they also perform comprehensive platform modernization programs. (Elbit 24.11)

[Back to Table of Contents](#TOC)

* 1. Otonomo Delivers New Fleet Product Enhancements to Streamline User Experiences

Otonomo Technologies announced a new set of fleet enablement capabilities to support fleet operators as they scale and grow their businesses. The new services available through the Otonomo Smart Mobility Data Platform enable fleet managers greater self-service and ease-of-use, resulting in a highly customized user experience, easily tailored to fleet-focused business needs. New features support Otonomo’s fleet customers by providing the ability to self-serve vehicle attribute data, confirm vehicle connectivity via vehicle identification number (VIN), and deliver a single-pane-of-glass view into both newer connected fleet vehicles and legacy vehicles via hardware-based connectivity. This suite of updates also includes a seamless and intuitive customer-driven onboarding experience for faster time to value.

With a focus on continual improvement, Otonomo enables customers to tailor their connected fleet experience according to their business needs. With Attribute Explorer customers can easily review the specific data available in their connected fleet by make, model and year – from speed to fuel/charge level, from oil pressure to tire pressure. Attribute Explorer is available from within the Otonomo interface or via direct API feed.

Herzliya's [Otonomo](http://www.otonomo.io), the platform powering the mobility economy, is igniting a new generation of mobility experiences and services and is making mobility more accessible, equitable, sustainable and safe. With Otonomo, over 100 providers in the transportation, mobility, insurance and automotive industries are able to harness mobility data and transform them into strategic and market advantages. (Otonomo 01.12)

[Back to Table of Contents](#TOC)

* 1. Adaptive Shield Releases SaaS-to-SaaS Capabilities to Minimize Risks

Adaptive Shield announced new capabilities to discover and monitor 3rd party apps connected to the core SaaS stack. With this new capability, Adaptive Shield is minimizing the risk that SaaS-to-SaaS, also known as 3rd party app access, presents. Security teams can now quickly and easily manage sanctioned apps and discover unsanctioned apps that have access to the company’s data.

Adaptive Shield recently announced their ability to integrate with 100+ SaaS apps, the first and only SSPM solution to provide this large number of out-of-the-box integrations. Their deep knowledge and expertise over the wide array of application characteristics, hubs and interconnected apps powers these new capabilities of 3rd party discovery within the Shadow IT domain.

Tel Aviv's [Adaptive Shield](http://www.adaptive-shield.com), the leading SaaS Security Posture Management (SSPM) company, enables security teams to gain and maintain a secure SaaS app stack by continuously monitoring SaaS apps, SaaS users and their devices, identifying misconfigurations, assessing SaaS-to-SaaS risk and fixing any weakness. (Adaptive Shield 30.11)

ISRAEL ECONOMIC STATISTICS

[Back to Table of Contents](#TOC)

* 1. Israeli Startups Raised Over $600 Million in November

Israeli startups raised over $600 million in November 2022, according to press releases seen by [Globes](https://en.globes.co.il/en/news/). The figure may be more as some companies prefer to remain in stealth and sometimes do not publicize the investments they have received.

Israeli privately-held tech companies raised a record $25.6 billion in 2021, according to IVC, more than double 2020's figure of $10 billion, which was itself a record. Israeli startups raised $13.5 billion in the first nine months of 2022, according to IVC, so although well off the pace of last year's record, startups have already raised nearly 50% more than in all of 2020. Israeli startups have raised $14.8 billion in the first eleven months of 2022.

The low figure for November is more evidence of the slowdown in the global tech industry, and was even lower than the $700 million raised in October, when there was a fewer number of work days due to the holidays.

In November, the major financing rounds that were completed were led by AI data platform Weka, which raised $135 million. Cybersecurity company Apiiro raised $100 million, secrets management company Akeyless raised $65 million, robot drug delivery company Bionaut raised $43.2 million, and car marketing data company Autoleadstar raised $40 million. (Globes 01.12)

[Back to Table of Contents](#TOC)

* 1. Jerusalem Slips To Second-Lowest Socio-Economic Tier

Jerusalem has fallen from the third lowest tier to the second lowest tier in the socio-economic rating released by the Central Bureau of Statistics. In the survey, which relates to 2019 and is published every two years, the tenth tier is the country's wealthiest and the first tier is the poorest. In the previous survey relating to 2017, Jerusalem had improved from the second tier to the third tier. In the rankings relating to 2015, Jerusalem had slipped from the third tier to the second tier, as in the latest survey.

Most of Israel's other major cities saw their ranking unchanged in today's report. Savion, Kfar Shmaryahu and Lehavim remain in the tenth and top tier. Modi'in is in the ninth tier but Ness Ziona fell from the ninth tier to the eighth tier. Tel Aviv, Ramat Gan and Herzliya remain in the eighth tier and Haifa, Rishon LeZion and Petah Tikva are in the seventh tier. Beer Sheva is in the fifth tier and in the latest survey Ashdod, Ramla and Dimona have risen from the fourth to the fifth tier. In the first and lowest tier are the Bedouin towns of Neve Midbar, Arara and Tel Sheva as well as the ultra-Orthodox Jewish towns of Modi'in Illit and Beitar Illit. Bnei Brak, like Jerusalem is in the second lowest tier. (CBS 23.11)

[Back to Table of Contents](#TOC)

* 1. Israel's Average Salary Rises by 4.7%

Israel's average salary in September 2022 was NIS 12,214, the Central Bureau of statistics reported, rising by 4.7% from September 2021 but down slightly from August 2022. The average salary in the tech sector in September 2022 was NIS 27,511, 5.1% higher than September 2021 - the biggest jump ever in the average monthly salary - but down slightly from NIS 27,880 in August 2022.

At the same time there was a 9.9% jump in the number of salaried employees in the tech sector from 353,300 in September 2021 to 388,300 in September 2022 and also up from 386,800 in August 2022. According to the Central Bureau of Statistics, the hi-tech sector employed 10% of salaried employees in Israel in September 2022, up 0.2% from August 2022.

Average monthly salaries in Israel in the tech sector peaked in February 2022, when they exceeded the NIS 30,000 threshold and reached NIS 30,049. But after March 2022, average monthly salaries in the tech sector began falling to NIS 26,878, mainly due to the sharp fall in valuations of publicly trade and some large privately held tech companies, and the wave of layoffs that ensued. (CBS 04.12)

[Back to Table of Contents](#TOC)

* 1. Chinese Shake Up Israel's New Car Market

Some 256,700 new cars were delivered in Israel in the first 11 months of 2022, down 9.8% from the corresponding period of 2021, and close to the average over the past decade. But, overall numbers aside, the past year has seen remarkable changes in the car market as the emphasis shifts from gasoline and diesel fueled cars to electric vehicles. Nearly 10% of new cars sold in 2022 are electric vehicles compared with 1% three years ago and about 35% of the new cars sold in November were electric vehicles. This percentage could rise further in December as buyers rush to bring in an electric vehicle before purchase tax rises from 10% to 20% in January.

The shift to electric cars has also shaken up the mix of brands being sold in Israel with Chinese companies moving strongly into the local market. In the first 11 months of 2022, 24,000 electric vehicles were sold in Israel including 6,000 in November alone and 64% of the electric vehicles sold in Israel this year were made in China. This figure includes Western brands that are manufactured in China such as Tesla and Polestar (Volvo) although the Chinese see them as exports to the west.

Chinese carmaker Geely leads the way in overall 2022 EV car sales in Israel. Geely has sold 5,700 of its Geometry C EVs and has a 25% market share. In second place is Tesla, which has sold 4,000 Model 3 EVs, giving it a 17.5% market share. In third place is Chinese company BYD, which has sold 1,860 of its ATTO 3 EVs, despite only launching in Israel two months ago.

Overall, eight new Chinese models have arrived in Israel in 2022 and this is just the start. At least another two brands - Dongfeng's Voyah and Great Wall's Wey will be launched in Israel before the end of the year. In 2023, one can expect to see at least another five new models including Great Wall's Ora, priced for the mass market and Hozon's Neta, also for the mass market. Geely's Smart will be directed at the compact-premium market and Geely's Zeekr will target the premium market. (Globes 05.12)

IN DEPTH

[Back to Table of Contents](#TOC)

* 1. ISRAEL: Israel Agrees to Qatar's Drilling in the Lebanese Maritime Gas Field

Israel approved the involvement of the Qatari Energy Consortium for drilling for natural gas in the Kana-Sidon undersea reservoir. Drilling rights in this zone, called Block 9, are currently held by France's TotalEnergies and Italy's Eni.

On 15 November, Israel signed an agreement with both companies to begin energy exploration in the area. Block 9 lies within Lebanon’s territorial waters, but the exploration might extend into Israel’s waters. Israel’s 22 November approval will enable the Qatari company to buy some of the drilling rights from the French company to participate in the expected exploration.

The Israeli approval for the Qatari company and agreement with TotalEnergies and Eni follow the American-brokered deal signed on 27 October between Israel and Lebanon that defined the maritime boundaries between the two countries, resolving a long dispute over drilling rights. According to the boundaries agreement, most of the Kana-Sidon reservoir will be in Lebanese hands, while a small part under Israeli ownership. It also states that Israel holds veto rights on the companies drilling there, hence the need for its approval on Qatar. It seems Qatar will be allowed to participate in the exploration at a limit of 30% of drilling rights.

Israel’s Energy Ministry confirmed that in the framework of the agreement, in order to ensure Israel’s rights in the Sidon Reservoir, an option was also authorized for the Qatari company Energy Consortium to join. On 30 October, Bloomberg reported that Qatar was in talks with TotalEnergies for a 30% stake in the exploration of Block 9.

Israel has been successfully drilling natural gas from other reservoirs in the Mediterranean. The Lebanese government expects to do the same. Beirut hopes to find exportable quantities of gas to generate the revenues the economically strapped country so desperately needs. According to Israeli decision-makers, the dire straits of the Lebanese economy was one of the major incentives for the government in Jerusalem to reach a compromise with Beirut.

Israel does not have diplomatic relations with either Lebanon or Qatar. The approval for the Qatari company comes on the backdrop of Doha’s approval for direct flights from Tel Aviv to the city during the World Cup. A first direct commercial flight from Tel Aviv landed in Doha on 20 November. Thousands of Israelis arrived to Qatar for the event, entering the country with their Israeli passports on a special fan visa. Qatar clarified that the special measures set in place for Israeli soccer fans reflect no change in its policy vis-à-vis Israel. (Al-Monitor 23.11)

[Back to Table of Contents](#TOC)

* 1. ISRAEL: Education Abroad Comes With a High Cost for Israeli Students

The [Jerusalem Post](https://www.jpost.com/israel-news/article-723953) reported on 3 December that Israeli students have sought higher education opportunities worldwide at increasingly high rates. Though the cost of a university education in Israel may be high, many students seek opportunities to study abroad at a higher cost. From specialty education to semester experiences, Israeli students are paying the price of experience.

There is no single answer on the question of cost for courses abroad for Israeli students. Factors that impact these numbers include country of study, type of institution and ultimately the university of choice.

According to HE search platform Erudera.com, students from Israel pay anywhere from $3,200 to $19,288 per year to study abroad. Though cost of this educational experience overseas can be largely impacted by the local cost of living in their city or country of choice, the educational cost ultimately boils down to one key factor: the educational institution and its price tag.

Student fees for international education varies. In Australia, university fees often exceed $14,000, whereas countries like Germany and Argentina typically offer tuition-free studies.

Of international students worldwide, a sweeping majority chooses to study in the United States. Approximately 1,075,496 students opt to seek educational opportunities in the USA. Half as many chose to study in the UK and Canada, at just 551,495 pursuing studies in the UK and 503,270 studying in Canada. Some 228,403 chose to study at Japan. Compared to other nations, Spain has far fewer foreign studiers than its contenders - hosting around 125,675 students in 2022.

More than 2,000 Israeli students bore the price tag of an American university, sometimes exceeding $60,000, according to data presented by Erudera. Students chose to focus on experience over price tag in a sweeping amount of cases. By the same accord, more than 1,800 Israeli students sought education in Germany, which has options for free tuition for students both domestically and coming from abroad.

An alternative route for Israelis exploring university education abroad is pursuing an online degree is $2,250. This provides a stable and flexible option for Israelis hoping to find an affordable option that works for them. Education abroad has another important factor that, when considered, can make or break the entire experience a student has in a country.

The cost of living can be incredibly high in places where tuition is low - some key examples including Japan and Australia. Though Australian international student tuition is hefty in itself, student expenses often outweigh other parts of student life. Israeli students may be reluctant to seek educational opportunities in places that might leave them with empty pockets outside of the classroom. (JP 03.12)

[Back to Table of Contents](#TOC)

* 1. KUWAIT: Benefits from Oil Price Boom but Long-Term Economic Challenges Loom

On 23 November, Hassan Jivraj observed in [Al-Monitor](https://www.al-monitor.com) that Kuwait's Ministry of finance announced on 20 November that it had narrowed its budget deficit for the 2021-2022 financial year more than it had initially forecasted, dropping 72.2% year-on-year to 2.99 billion dinars ($9.71 billion). The improvement comes on the back of elevated oil revenues.

Meanwhile, the newly elected parliament approved on 1 November the country’s delayed budget for the fiscal year 2022-2023. The budget assumes an oil price of $80 per barrel and a break-even point of $80.4. It forecasts that revenues will be 23.4 billion dinars ($76 billion) with 91% deriving from oil. Expenditure is expected to be at 23.5 billion dinars ($76.3 billion), with around 75% of expenditure being directed toward public sector salaries and subsidies.

After a lackluster performance over the past few years due to the pandemic and depressed global oil prices, Kuwait’s economy is set to have a strong 2022 and 2023. Real GDP is expected to be 8.5% this year, the highest among all GCC countries, according to a recent World Bank forecast. Kuwait is a major oil producer, holding around 7% of the world’s oil reserves. Oil accounts for around half of Kuwait’s GDP, as well as 95% of exports and approximately 90% of government export revenue.

The Gulf state remains heavily reliant on oil and faces challenges in passing key reforms, an unsustainable public sector wage bill and a lack of a diversified economy. Kuwait’s domestic politics have also hindered progress in enacting key economic reforms.

Although the emir heads the executive, the country’s 50 seat parliament is responsible for legislative, political and financial affairs, which include debates and ratifications of public budgets as well as key financial bills such as the public debt law. As a result, Kuwait is subject to frequent political stalemates, a high turnover of government officials, frequent dissolutions of parliament, and has had numerous Cabinets and elections since 2006. The government keeps changing primarily due to the hybrid political model in place and the need for cooperation and goodwill between both branches for the system to smoothly operate.

One of the most contentious reforms is the public debt law. The law would enable Kuwait to borrow via international bond markets. The IMF notes that a public debt law would provide the government with a fiscal anchor, reduce fiscal risks and improve its ability to manage adverse shocks. The fund also notes that the law would also set the debt ceiling, improve financial transparency as well as clarify the borrowing of state-owned entities.

In the absence of the public debt law, Kuwait is unable to sell international bonds and instead relies on the General Reserve Fund (GRF). The GRF is the main repository of all of Kuwait’s oil revenues and income earned from GRF investments. The GRF’s assets and income are available for use by the government through the budget. Kuwait sold its first and only Eurobond — an $8 billion dual-tranche deal consisting of a $3.5 billion 2.8% 2022 note and a longer-dated $4.5 billion 3.6% 2027 piece — in March 2017.

The issuance received orders amounting to $20 billion. While the deal was hailed by international investors, domestically it received some strong criticism from segments of Kuwait’s political and business class over corruption and wastefulness. At the time, the government sold the international debt after parliament provided a temporary debt law to plug a public financing gap. That provision expired in 2017, and successive parliaments have failed to pass a permanent law despite past government efforts.

Other pressing reforms include economic diversification, reforming Kuwait’s sovereign wealth funds and introducing VAT and other taxation.

In 2017, Kuwait agreed to introduce a GCC-wide VAT but it has yet to implement it or announce a formal date. Similarly, the IMF has encouraged Kuwait to introduce other forms of taxation such as excise duties, expanding corporate tax to domestic firms and implementing property tax. (Al-Monitor 23.11)

[Back to Table of Contents](#TOC)

* 1. EGYPT: Japan's Nomura Bank Says EGP Most Vulnerable EM Currency

Japanese bank [Nomura](https://www.nomuraconnects.com) reported that Egypt is the most vulnerable emerging-market country to a currency crisis over the next 12 months. Egypt is ranked highest of the 32 EM nations included on the bank’s Damocles Index, indicating a strong chance that the country will suffer an exchange-rate crisis in the coming months.

Nomura describes its Damocles Index as an “early warning model of EM exchange rate crises.” It uses eight indicators — focusing on FX reserves, debt levels, and the exchange rate and capital inflows — to produce a score. Anything over 100 signifies a 64% chance that the will experience an exchange rate crisis in the following 12 months, the bank says.

Nomura gave Egypt a score of 165 in the latest index, joining six other countries on the bank’s most-vulnerable list, among which are Romania (145), Sri Lanka (138), Turkey (138) and Pakistan (120). Although the currencies of Egypt, Sri Lanka, Turkey and Pakistan have depreciated sharply in the last 12 months, Damocles indicated that they are not yet out of the woods due to their still-weak economic fundamentals including high inflation.

The EGP has fallen to a record low against the USD this year as tightening financial conditions and spillover effects from the war in Ukraine hit Egypt’s external position. The currency has been one of the world’s worst-performing currencies, tumbling 56% against the USD since March after the central bank twice devalued the currency. Since the central bank announced a floating exchange rate at the end of October, the currency has fallen 24.5% and has continued to gradually slide through November.

The float, together with the reassurance of a new IMF program, has begun to bring foreign currency back into the country — at least into the stock market, which has surged almost 20% since the central bank’s announcement in October. Data released in the coming months will give us an idea of the impact on the local bond market and the current account. (Various 22.11)

**\*\* - Copyright 2022 by Atid, EDI. All rights reserved.**

The **Fortnightly** newsletter is a free service of Atid, EDI. We are a team of economic and trade development consultants, headquartered in Jerusalem, but active throughout the region and beyond. EDI works with an international clientele interested in identifying and researching business opportunities in the region. We also serve as the regional representative offices for a number of U.S. states and bilateral Chambers of Commerce, as well as European clients.

EDI's other services include development of feasibility studies and tailored research reports, as well as identification of potential joint ventures for commercial clients. For more information on how we may better assist you, please visit our Web site at: http:// [www.atid-edi.com](http://www.atid-edi.com).

**\* END \***