Electrifying Europe: the infrastructure opportunity behind the EU action plan

Published August 19, 2026

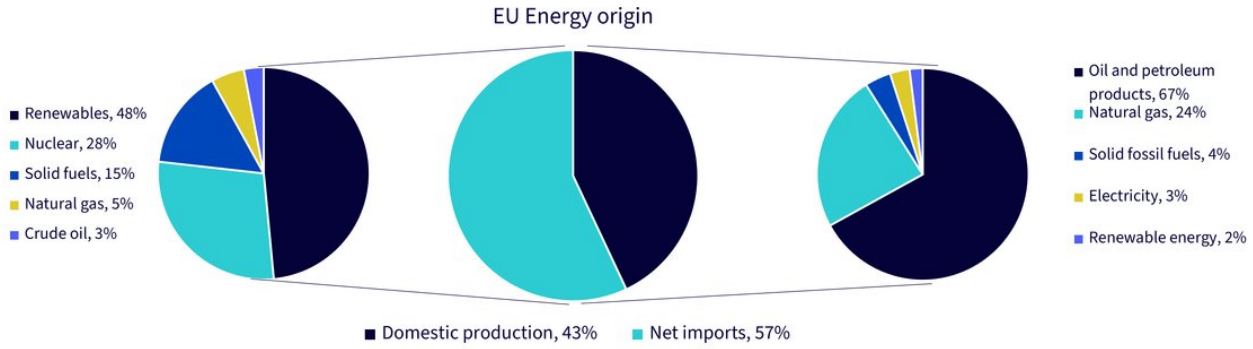
Baoqi Zhu
Associate Director, Quantitative Research & Multi Asset Solutions

Key Takeaways

- Electrification supports both energy security and decarbonisation, by shifting more energy demand away from imported fossil fuels towards electricity.
- Europe's grid is a key constraint. The Commission estimates around €1.2 trillion of transmission and distribution investment may be needed by 2040.
- The opportunity extends beyond power generation to the companies supplying and building cables, transformers, substations, switchgear, HVDC systems, inverters and digital grid equipment.
- Where the equipment comes from increasingly matters. EU policy is placing greater emphasis on cybersecurity, supply-chain resilience and European manufacturing capacity.

Europe's energy transition is often presented as a generation story: build more wind and solar, then replace imported fossil fuels. But it is also an energy-security strategy. In 2024, the EU produced 43% of its energy domestically and met the remaining 57% of its needs through net imports, dominated by oil and natural gas. This leaves European households and businesses exposed to geopolitical disruption and volatile global fuel prices.

Figure 1: Europe's energy origin and import mix

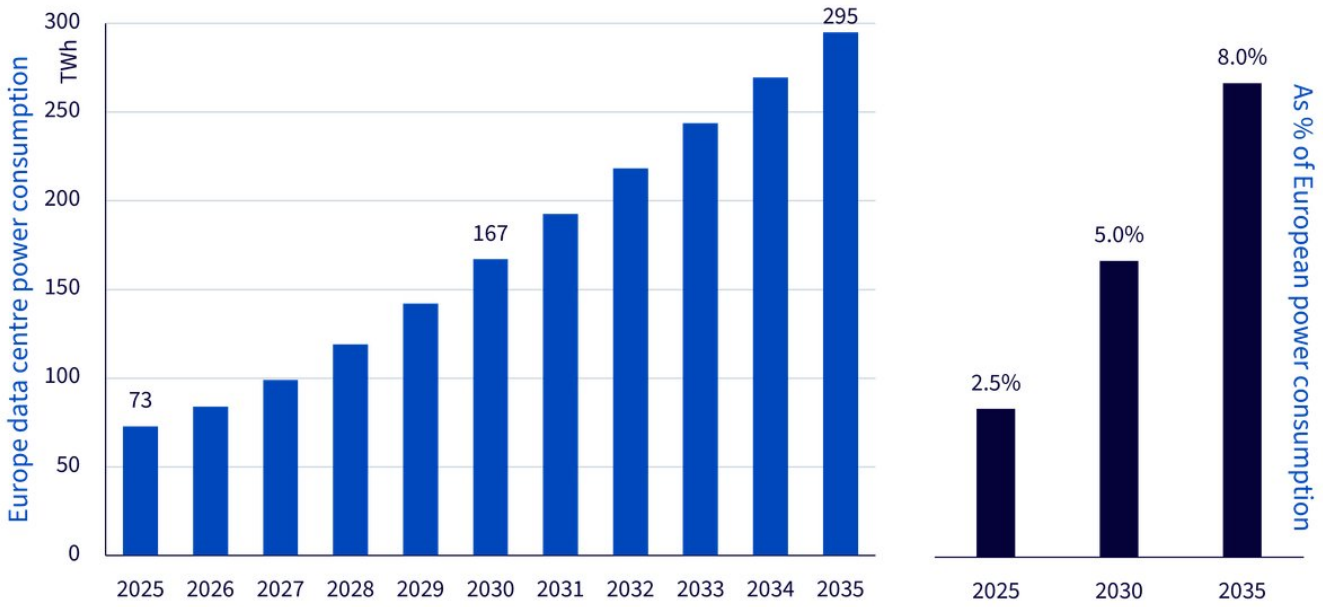


Source: Europe Commission. "In focus: EU energy security explained", 20 April 2026.

Electrification offers one route to reducing that dependence. Europe's electricity system is already considerably cleaner than its overall energy mix, with renewables supplying around half of gross electricity consumption. The EU's Electrification Action Plan seeks to increase electricity's share of final energy use from about 23% today towards an indicative 46% by 2040[1].

That would bring more industrial processes, heating and transport onto the power system. Data centres and other electricity-intensive activities will add further demand. At the same time, the grid must connect more renewable and other low-carbon generation, often located far from existing centres of demand. Europe therefore needs more than additional generating capacity. It also needs networks that can carry and manage larger volumes of electricity.

Figure 2: Rising AI power demand is making grid capacity the binding constraint



Source: Morgan Stanley, 'Powering AI Comes To Europe', 03 December 2025. **Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.**

A power target meets a physical constraint

Around 40% of Europe's distribution grids are more than 40 years old[2], and new grid connections can already take years. The European Commission estimates that Europe may need around €730 billion of investment in distribution grids and €477 billion in transmission, including offshore networks, by 2040. Together, that amounts to roughly €1.2 trillion[3].

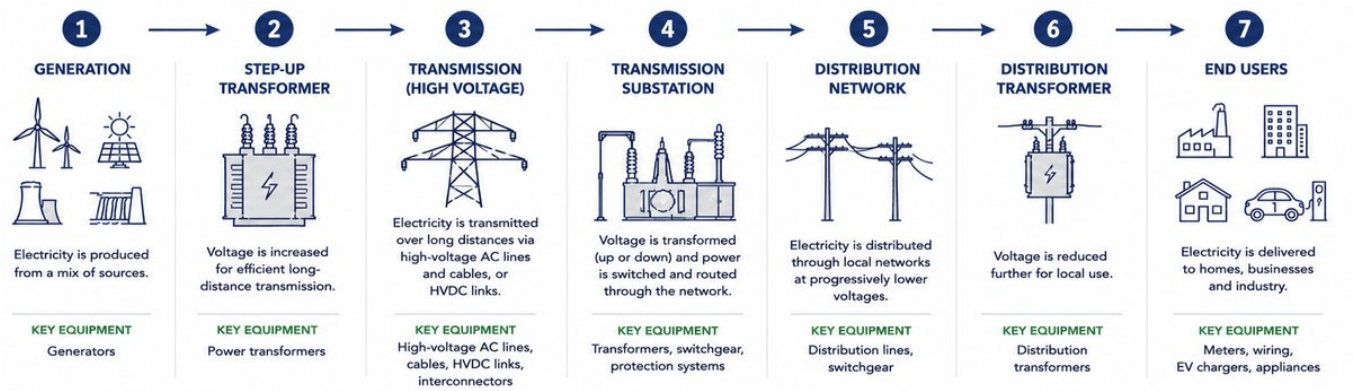
Much of the investment will be needed at distribution level because electrification happens locally. A factory replacing fossil-fuel equipment with electric systems, a depot installing high-power chargers or a neighbourhood adopting heat pumps can all require stronger local networks, substations and transformers. Transmission investment is needed for a different set of pressures: connecting offshore generation, moving power between countries and relieving congestion.

Building more infrastructure will only address part of the problem. A more electrified system must handle two-way power flows from distributed solar, batteries and electric vehicles and respond faster to changes in supply and demand. Smart meters, digital controls and more flexible connections can help operators make better use of existing network capacity.

The opportunity runs through the grid infrastructure chain

The investment reaches companies that supply and build the infrastructure needed for the electricity system. High-voltage and subsea cables connect offshore generation and cross-border interconnectors. Transformers adjust voltage levels. Switchgear protects equipment and controls power flows. Substations, high-voltage direct current (HVDC) systems, power electronics and digital controls are all needed to transmit and manage electricity reliably.

Figure 3: Flow of electricity and key equipment



Source: WisdomTree.

Current order books suggest that demand is already strong. Prysmian reported a transmission backlog of around €16.8 billion at March 2026[4]. Nexans reported an adjusted transmission backlog of €7.9 billion, providing visibility through 2028[5]. Siemens Energy's group order backlog reached a record €154 billion in its second quarter, supported by strong demand in Grid Technologies[6].

Prysmian, Nexans and NKT combine cable manufacturing with engineering and installation capabilities for large transmission and interconnection projects. Siemens Energy supplies transformers, substations, HVDC and other high-voltage technologies. ABB and Schneider Electric cover electrical distribution, switchgear, automation and energy-management systems.

These products are used across renewable, nuclear, storage and interconnection projects. Grid equipment suppliers are therefore less dependent on the success of any single generation technology.

Keeping more of the electrification value chain in Europe

Europe could reduce its dependence on imported fossil fuels only to create new dependencies on imported electrical technologies. Recent EU restrictions on public funding for projects using inverters from 'high-risk countries' show that policymakers are increasingly aware of that risk[7].

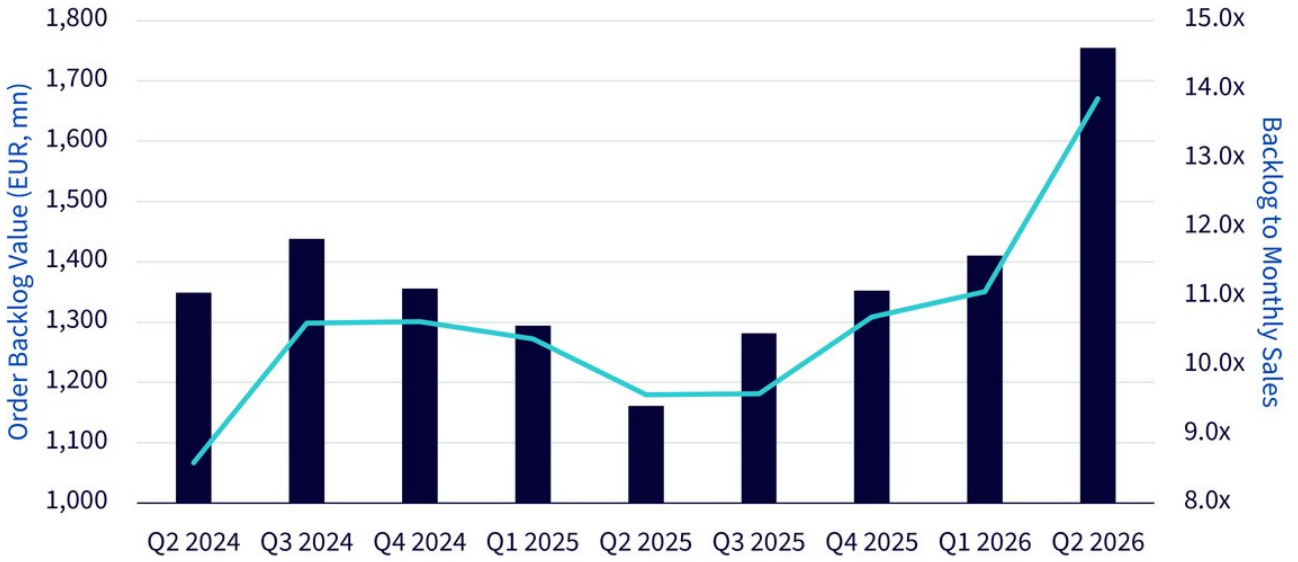
Modern inverters are more than simple hardware components. They connect solar and battery systems to the grid, can receive remote software updates and can influence power flows. Chinese manufacturers have supplied around 70% of Europe's inverters in 2023, a figure also cited in a recent European Commission assessment[8]. European suppliers, such as Germany-based SMA Solar Technology, the world's third-largest solar inverter manufacturer[9], provide an alternative, with products spanning utility-scale solar, storage and grid-integration applications.

Figure 4: 2026 global solar inverter manufacturer ranking

Rank	Headquarters	Manufacturer
1	China	Sungrow
2	China	Huawei
3	Germany	SMA
4	China	Goodwe
5	United States	Enphase
6	China	Hoymiles
7	China	Ginlong Solis
8	Israel	Solaredge
9	Austria	Fronius
10	China	APsystems

Source: Wood Mackenzie. Huawei's ranking is based on Wood Mackenzie's estimation.

Figure 5: SMA Solar Technology backlog recovery gains momentum



Source: Bloomberg, company filings. As of 12 August 2026. **Historical performance is not an indication of future performance and any investments may go down in value.**

Restricting access to established suppliers may raise costs or slow deployment in the short term. But the policy reflects broader concerns about cybersecurity and dependence on foreign suppliers of critical infrastructure.

The proposed Industrial Accelerator Act takes this further. It would introduce European-origin and low-carbon criteria into selected public procurement and support schemes in strategic sectors. Although the proposal is not final legislation, the policy direction is clear: Europe wants more of its infrastructure spending to support European manufacturing and supply-chain capacity.

Conclusion

The Electrification Action Plan points to a substantial investment cycle. Turning policy into spending will depend on project execution and on suppliers adding capacity, but the direction is clear. Raising electricity's share of final energy use from around 23% towards 46% will require far more than new generation.

Renewable power remains essential, but so do the cables, transformers, substations, switchgear, power electronics and digital systems needed to connect, transmit and control it. For investors, the opportunity therefore extends beyond power generation to the companies building the physical backbone of Europe's electrification.

What WisdomTree Offers

The WisdomTree Europe Infrastructure UCITS ETF (WBLD) is designed to capture this opportunity through companies involved in building and supplying Europe's next generation of infrastructure. Its value-chain approach targets exposure to construction firms and key component suppliers, avoids pure operators, and aligns the portfolio more closely with the areas where public funding, procurement rules

and industrial policy may drive growth. The portfolio allocates meaningful exposure to electrical equipment suppliers which are directly relevant to the electrification trend in Europe.

Figure 6: WisdomTree Europe Infrastructure UCITS ETF's coverage in the infrastructure value chain



Source: WisdomTree.

An investment in the WisdomTree Europe Infrastructure UCITS ETF may involve a number of risks. The value of shares in the fund may go down as well as up and investors may lose some or all of the amount invested. The fund provides exposure to companies associated with the European infrastructure theme and may therefore be more sensitive to economic, political, regulatory or industry-specific developments affecting these companies. There is no guarantee that the anticipated growth in European infrastructure investment will materialise or that companies exposed to this theme will benefit from it. Please refer to the KID and prospectus for full details of the risks associated with an investment in the fund.

[1] Source: European Commission, 'Electrification', energy.ec.europa.eu, August 2026.
[2] Source: European Commission, 'Electrification', energy.ec.europa.eu.
[3] Source: European Commission, 'EU guidance on ensuring electricity grids are fit for the future', energy.ec.europa.eu.
[4] Source: Prysmian, Financial Report at 31 March 2026.
[5] Source: Nexans, First-quarter 2026 financial information.
[6] Source: Siemens Energy, Earnings Release Q2 FY2026.
[7] Source: Wood Mackenzie, 'Ban on inverters from high-risk countries, led by China, to affect 14% of EU solar demand through 2030', woodmac.com.
[8] Source: European Commission, Impact Assessment accompanying the proposal for a Regulation amending the Cybersecurity Act, 2026.
[9] Source: Wood Mackenzie, 'Solar inverter manufacturer ranking 2026', woodmac.com.

Important Information

Marketing communications issued in the European Economic Area ("EEA") & Switzerland: This document has been issued and approved by WisdomTree Ireland Limited, which is authorised and regulated by the Central Bank of Ireland.

Marketing communications issued injurisdictions outside of the EEA, except Switzerland: This document has been issued and approved by WisdomTree UK Limited or Atlantic House Investments Limited, which are both authorised and regulated by the United Kingdom Financial Conduct Authority.

WisdomTree Ireland Limited, WisdomTree UK Limited and Atlantic House Investments Limited are referred to as "WisdomTree" (as applicable) throughout. Our Conflicts of Interest Policy and Inventory are available on request.

This marketing communication is intended for all investors; however, the WisdomTree products described in this document and related materials may be restricted in certain jurisdictions and may only be available to particular categories of investors in accordance with applicable laws and regulations. Where a product is not authorised or its distribution is restricted in your jurisdiction, it is the responsibility of any person or entity in possession of this information to inform themselves of, and comply with, all relevant restrictions. Before making any investment, investors should seek appropriate legal, regulatory, tax and investment advice to assess the suitability and implications of investing in these products. Information about WisdomTree products is available at wisdomtree.eu. WisdomTree does not offer investment advice tailored to individual circumstances. Past performance is not a reliable indicator of future performance. Any historical performance included in this document may be based on back testing. Back testing is the process of evaluating an investment strategy by applying it to historical data to simulate what the performance of such strategy would have been. Back tested performance is purely hypothetical and is provided in this document solely for informational purposes. Back tested data does not represent actual performance and should not be interpreted as an indication of actual or future performance. The value of any investment may be affected by exchange rate movements. Any decision to invest should be based on the information contained in the appropriate prospectus and after seeking independent investment, tax and legal advice. The content of this document does not constitute investment advice nor an offer for sale nor a solicitation of an offer to buy any product or make any investment.

This marketing communication should be read in conjunction with the relevant WisdomTree products' Prospectus, Key Investor Information Document ("KIID"), Key Information Document ("PRIIPS KID") as relevant. In particular, investors should carefully read the specific risks detailed under the section entitled 'Risk and Reward Profile' in the KIID, 'What are the risks and what could I get in return?' in PRIIPs KID and under the section entitled 'Risk Factors' in the Prospectus of the Issuer for further details of risks associated with an investment in the product(s) detailed herein. Further information regarding the WisdomTree exchange-traded product(s) detailed herein, such as a detailed list of the underlying investments and the indicative net asset value, can be obtained by visiting the WisdomTree website at (www.wisdomtree.eu).

An investment in WisdomTree exchange-traded products ("ETPs") is dependent on the performance of the underlying index, less costs, but it is not expected to match that performance precisely. An investment in WisdomTree funds is dependent on the performance of the underlying investments, less costs.

Both WisdomTree ETPs and funds involve numerous risks including among others, general market risks relating to any relevant underlying index, credit risks on the provider of index swaps utilised in ETPs, exchange rate risks, interest rate risks, inflationary risks, liquidity risks, derivatives risk and legal and regulatory risks.

The information contained in this document is not, and under no circumstances is to be construed as, an advertisement or any other step in furtherance of a public offering of shares in the United States or any province or territory thereof, where none of the issuers or their products are authorised or registered for distribution and where no prospectus of any of the issuers has been filed with any securities commission or regulatory authority. No document or information in this document should be taken, transmitted or distributed (directly or indirectly) into the United States. None of the issuers, nor any securities issued by them, have been or will be registered under the United States Securities Act of 1933 or the Investment Company Act of 1940 or qualified under any applicable state securities statutes.

This document may contain independent market commentary prepared by WisdomTree based on publicly available information. Although WisdomTree endeavours to ensure the accuracy of the content in this document, WisdomTree does not warrant or guarantee its accuracy or correctness. Any third party data providers used to source the information in this document make no warranties or representation of any kind relating to such data. Where WisdomTree has expressed its own opinions related to product or market activity, these views may change. Neither WisdomTree, nor any affiliate, nor any of their respective officers, directors, partners, or employees accepts any liability whatsoever for any direct or consequential loss arising from any use of this document or its contents.

This document may contain forward looking statements including statements regarding our belief or current expectations with regards to the performance of certain assets classes and/or sectors. Forward looking statements are subject to certain risks, uncertainties and assumptions. There can be no assurance that such statements will be accurate and actual results could differ materially from those anticipated in such statements. WisdomTree strongly recommends that you do not place undue reliance on these forward-looking statements.

WisdomTree Issuer ICAV

Certain funds referred to in this document are issued by WisdomTree Issuer ICAV ("WT Issuer"). WT Issuer is an open-ended, umbrella-type Irish Collective Asset-management Vehicle with segregated liability between sub-funds and is authorised by the Central Bank of Ireland ("CBI") as an Undertaking for Collective Investment in Transferable Securities ("UCITS") under Irish law. Each fund is represented by a separate class of shares (the "Shares") issued by WT Issuer.

The Fund is described in a Key Information Document (KID) or Key Investor Information Document (KIID) for UK investors, and the prospectus of WT Issuer ("WT Prospectus"). A copy of the WT Prospectus and the KID / KIID is available, for EEA/UK only, in English at www.wisdomtree.eu. Where required under national rules, the KID will also be available in the local language of the relevant EEA Member State. Investors should read the WT Prospectus before investing and should refer to the section of the WT Prospectus entitled 'Risk Factors' for further details of risks associated with an investment in the Shares.

The summary of investor rights associated with an investment in the fund is available in English on WisdomTree Europe's website. WisdomTree Management Limited may decide to terminate the arrangements made for the marketing of its collective investment undertakings. In such circumstances, shareholders in the affected EEA Member State will be notified of this decision and will be provided with the opportunity to redeem their shareholding in the fund free of any charges or deductions for at least 30 working days from the date of such notification.

For Investors in Switzerland:

This document/constitutes/an advertisement of the financial product(s) mentioned/herein.

The prospectus (in English only) and the key investor information documents (KID) (in German, French and Italian) are available from WisdomTree's website: https://www.wisdomtree.eu/en-ch/resource-library/prospectus-and-regulatory-reports

For WisdomTree UCITS products only: the representative and paying agent of the ETPs in Switzerland is Société Générale Paris, Zurich Branch,/Talacker/50, PO Box 5070, 8021 Zurich, Switzerland. The prospectus, the key investor information documents (KIID), the articles of association and the annual and semi-annual reports of the sub-funds are available free of charge from the representative and paying agent. As regards distribution in Switzerland, the place of/jurisdiction/and performance is at the registered seat of the representative and paying agent. Some of the sub-funds referred to in this document may not have

been registered with the Swiss Financial Market Supervisory Authority (“FINMA”). In Switzerland, such sub-funds that have not been registered with FINMA may only be available to Qualified Investors.

For Investors in France:

The information in this document is intended exclusively for professional investors (as defined under the MiFID) investing for their own account and this material may not in any way be distributed to the public. The distribution of the Prospectus and the offering, sale and delivery of Shares in other jurisdictions may be restricted by law. WT Issuer is a UCITS governed by Irish legislation, and approved by the Financial Regulatory as UCITS compliant with European regulations although may not have to comply with the same rules as those applicable to a similar product approved in France. The Fund has been registered for marketing in France by the Financial Markets Authority (Autorité des Marchés Financiers) and may be distributed to investors in France. Copies of all documents (i.e. the Prospectus, the Key Investor Information Document, any supplements or addenda thereto, the latest annual reports and the memorandum of incorporation and articles of association) are available in France, free of charge at the French centralizing agent, Societe Generale at 29, Boulevard Haussmann, 75009, Paris, France. Any subscription for Shares of the Fund will be made on the basis of the terms of the prospectus and any supplements or addenda thereto.

For Investors in Malta: This document does not constitute or form part of any offer or invitation to the public to subscribe for or purchase shares in the Fund and shall not be construed as such and no person other than the person to whom this document has been addressed or delivered shall be eligible to subscribe for or purchase shares in the Fund. Shares in the Fund will not in any event be marketed to the public in Malta without the prior authorisation of the Maltese Financial Services Authority.

For Investors in Monaco: This communication is only intended for duly registered banks and/or licensed portfolio management companies in Monaco. This communication must not be sent to the public in Monaco.

For Investors in Israel: Offering materials for the offering of the Shares and securities have not been filed with or approved or disapproved by the United States Securities and Exchange Commission or any other state or federal regulatory authority, nor has any such regulatory authority passed upon or endorsed the merits of this offering or passed upon the accuracy or completeness of any offering materials. Any representation to the contrary is unlawful. The products mentioned herein have not been approved by the Israel Securities Authority and will only be distributed to Israeli residents in a manner that will not constitute "an offer to the public" under sections 15 and 15a of the Israel Securities Law, 5728-1968 ("the Securities Law") or section 25 of the Joint Investment Trusts Law, 5754-1994 ("the Joint Investment Trusts Law "), as applicable. The products are being offered to a limited number of investors (35 investors or fewer during any given 12 month period) and/or those categories of investors listed in the First Addendum ("the Addendum") to the Securities Law, "Sophisticated Investors") who in each case have provided written confirmation that they qualify as Sophisticated Investors, and that they are aware of the consequences of such designation and agree thereto; in all cases under circumstances that will fall within the private placement or other exemptions of the Joint Investment Trusts Law, the Securities Law and any applicable guidelines, pronouncements or rulings issued from time to time by the Israel Securities Authority.

This prospectus or this document may not be reproduced or used for any other purpose, nor be furnished to any other person other than those to whom copies have been sent. Any offeree who purchases a product is purchasing such product for its own benefit and account and not with the aim or intention of distributing or offering such product to other parties (other than, in the case of an offeree which is a Sophisticated Investor by virtue of it being a banking corporation, portfolio manager or member of the Tel-Aviv Stock Exchange, as defined in the Addendum, where such offeree is purchasing a product for another party which is a Sophisticated Investor).

Nothing in this document should be considered investment advice or investment marketing as defined in the Regulation of Investment Counselling, Investment Marketing and Portfolio Management Law, 5755-1995. Investors are encouraged to seek competent investment counselling from a locally licensed investment counsel prior to making the investment. A recipient of this document may be required to provide confirmation that it is a Sophisticated Investor purchasing a product for its own account or, where applicable, for other Sophisticated Investors.