



# **SUSTAINABILITY** IN ASCENDING ASIA



# CONTENTS

---

I	Foreword	3
II	The Sustainability Imperative: A Global Challenge, with Asia in the Driver's Seat	5
III	The State of Sustainability in Major APAC Economies China India Japan Australia New Zealand	6
IV	Sustainability in Ascending Asia GCC Clean energy Mobility Green construction Food and agriculture Beauty, Retail and FMCG	10
V	ASEAN Clean energy Mobility Green construction Food and agriculture Beauty, Retail and FMCG	17
VI	Metito: The "Most Impactful Water Company Global 2021"	23
VII	Conclusion	24





# FOREWORD (TBD)

At Gulf Capital, we are proud of our successful and robust 15-year track record of building global leaders out of the Gulf region. We have developed a particular expertise in investing in market leading companies in West Asia and expanding them rapidly through bolt-on acquisitions and organic growth across East Asia. This focus on the West-East Asia corridor allows our companies to operate in the fastest-growing region in the world, which noted economist and futurist, Dr. Parag Khanna, appropriately named “Ascending Asia”. Our acumen in identifying market leading businesses, aligning with exceptional management teams, and internationalizing operations and revenue streams across Ascending Asia is a key cornerstone of our approach to value creation as a leading growth markets investor.

The growth opportunities presented by the emergence of Ascending Asia have never been greater, especially as sustainability concerns take an increasingly central stage among the forward looking governments in this region. Gulf Capital is well poised to capitalize on a once in a generation opportunity in cleantech in a region that will likely see a large share of the estimated \$2.4 trillion in annual sustainability driven investments required to slow rising temperatures and GHG emissions, as well as develop the clean energy and sustainable lifestyle sectors.

As a leading thematic asset manager, Gulf Capital is eager to expand our exposure to Ascending Asia’s sustainability focused opportunities. We are therefore honored to partner with Dr. Parag Khanna and FutureMap to jointly publish this white paper on the appeal and promise of sustainability in Ascending Asia, and we hope all global investors will appreciate the unique growth opportunities offered by this region.

Sincerely,

**Dr. Karim El Solh**

Chief Executive Officer

Gulf Capital



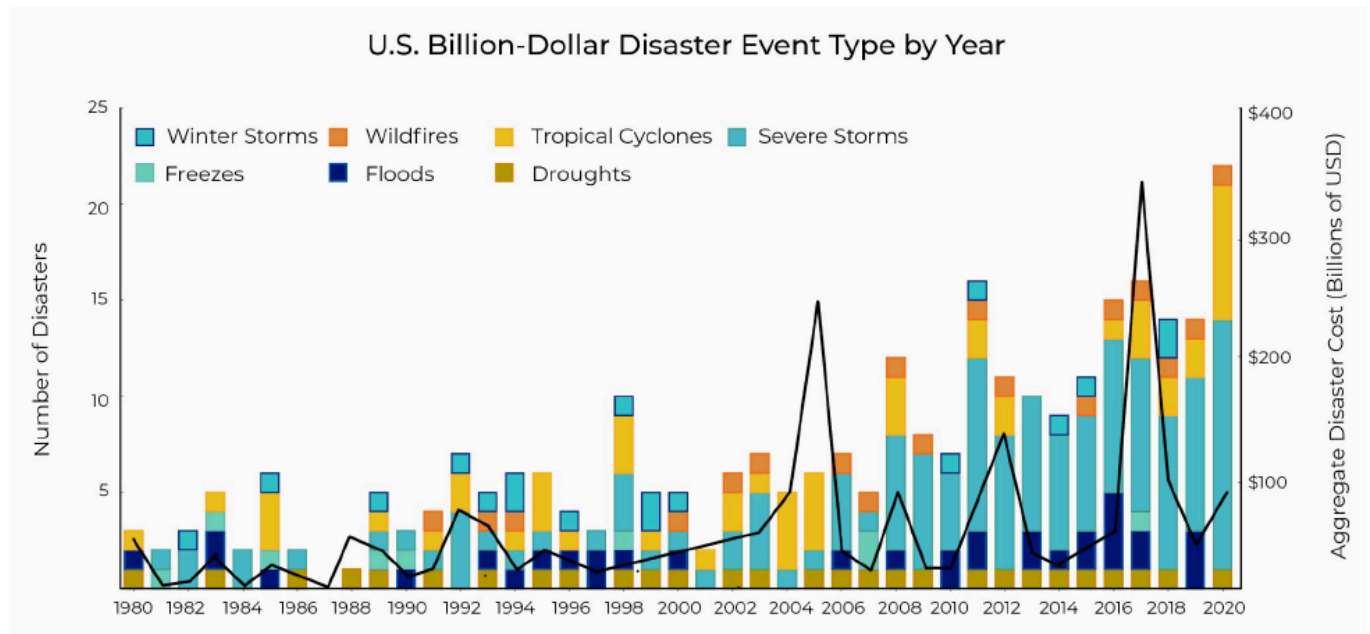
## **Disclaimer:**

Gulf Capital and FutureMap are not responsible for any errors or omissions, or for the results obtained from the use of information contained in this report. Nothing herein shall substitute for the independent investigation and the sound technical and business judgment of the user. In no event will Gulf Capital, FutureMap or its office bearers, partners, employees, associates, affiliates or agents, be liable for any decision made or action taken on the basis of this report.





# II THE SUSTAINABILITY IMPERATIVE: A GLOBAL CHALLENGE, WITH ASIA IN THE DRIVER'S SEAT



With the mean global temperature at a 125,000 year high, arctic sea ice minimums trending towards record lows, and the frequency of major climate disasters increasing by an order of magnitude over just the last 40 years, the effects of climate change are becoming increasingly evident. As global warming continues, rising seas threaten to displace over 700 million people over the next decade. Without robust mitigation measures, over 3 billion people could find themselves outside the 'human climate niche' by 2070. 122 million people could experience more acute protein deficiency as elevated atmospheric CO<sub>2</sub> lowers plant nutrition content. Over 1 million plant and animal species will face greater extinction threats. Climate change and habitat destruction will also increase the risk of zoonotic disease transmission.

Limiting temperature rise to below 1.5°C will require over \$2 trillion in sustainability-focused investments annually through 2035. Much of this investment will centre around Asia, home to a ~2.5 billion strong consumer base that will drive nearly half of global growth over the next decade.

Encouragingly, the demand for sustainability continues to grow across this region, with up-scaling, rentals, and second-hand ownership models becoming increasingly popular, especially among Asia's 822 million working age youth. Even among consumers in India and Indonesia -- where per capita incomes are below the Ascending Asia average -- there is a strong willingness to pay a premium for green products. As both incomes, and climate awareness increase, this willingness, across the continent, will only grow.



# III THE STATE OF SUSTAINABILITY IN MAJOR APAC ECONOMIES

**China** has emerged a global leader in clean energy, with 895GW in installed RE capacity as of 2020, 3x greater than the US. Beijing aims to increase RE capacity to over 1.2TW by 2030, and become carbon neutral by 2060. Among emerging clean fuels, green hydrogen is expected to supply 5% of China's power demand by 2030, presenting a \$150 billion opportunity.

China is also a leader in EV adoption, with the country accounting for over 40% of global EV sales in 2020. However, with only 1.3 million EVs sold, and with 86% of Chinese highlighting an openness to buy EVs, China's EV market will likely see strong growth over the medium-term. Recognizing the opportunity, domestic and international players have pledged significant investments in the country's EV sector; notably Xiaomi, which aims to invest \$10 billion by 2030, and Nissan which has pledged \$9 billion.

China is also projected to spend \$13 trillion on building construction over the next decade; 20% of the world's total. With only ~50% percent of new buildings currently certified as 'green,' investment opportunities in this sector will remain lucrative.



**895GW**

in installed **RE capacity as of 2020**, 3x greater than the US.  
**Beijing** aims to increase **RE capacity** to over **1.2 TW by 2030**, and become **carbon neutral by 2060**



China is also a leader  
in **EV adoption**

**86%**

of Chinese  
highlighting an  
openness to buy EVs.



China is also  
projected to spend

**\$13 trillion**

on **building construction**  
over the next decade; **20%**  
of the world's total.





**India** has set ambitious sustainability targets, notably in clean energy. The world's third largest GHG emitter aims to increase renewable energy (RE) capacity by over 4x to 450GW by 2030, with ~280GW expected to be new solar installations.

India is also targeting construction of 10 billion square feet of green buildings by 2022. Additionally, the government aims for electric vehicles to constitute 70% of new commercial vehicle sales, 30% of new private car sales, and 80% of new two-wheeler sales by 2030. Reaching this target will require EV infrastructure investments of ~\$180b over the next decade.



**450GW**

India aims to increase renewable energy (RE) capacity by over **4x to 450GW by 2030**, with **~280GW** expected to be new solar installations.



Government aims for electric vehicles to constitute

**70%**

of new commercial vehicle sales, 30% of new private car sales, and 80% of new two-wheeler sales by 2030.



India is also targeting construction of

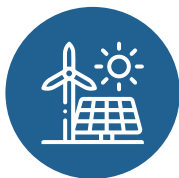
**10 billion**

square feet of green buildings by 2022.

---

**Japan** aims to generate ~38% of its power from renewable sources by 2030, a >2x increase from the current 18%. Hydrogen is expected to play a central role in the country's clean energy transition, with 5 million residential hydrogen fuel cells projected to be in operation by 2030.

Japan also plans to ban the sale of new gasoline cars by the mid-2030s. With traditional EV charging infrastructure still limited, hydrogen fuel cell vehicles could see significant growth over the medium-term. The government is targeting 800,000 hydrogen fuel cell vehicles by 2030, a 200-fold increase from 2019.



**~38%**

Japan aims to **generate ~38% of its power from renewable sources** by 2030, a **>2x increase** from the current 18%



**800,000**

Hydrogen fuel cell vehicles by 2030, a 200-fold increase from 2019.



**Australia** aims to produce 50% of its energy from renewable sources by 2030, further increasing this share to 100% by 2050.

Notable cleantech developments include the region's first pumped hydro energy storage system constructed in 2021, and the world's first 'solar hydropower plant,' a 3 MW/50 MWh facility that can store power for 17 hours.

However, despite Australia's ambitious clean energy goals, EV penetration remains low. 0.75% of new cars in 2020 were EVs, compared to the global average of 4%, with conflicting state regulations inhibiting faster EV uptake.



**100%**

Australia aims to produce  
**50% of its energy** from  
renewable sources by **2030**,  
further increasing this share  
to **100% by 2050**.



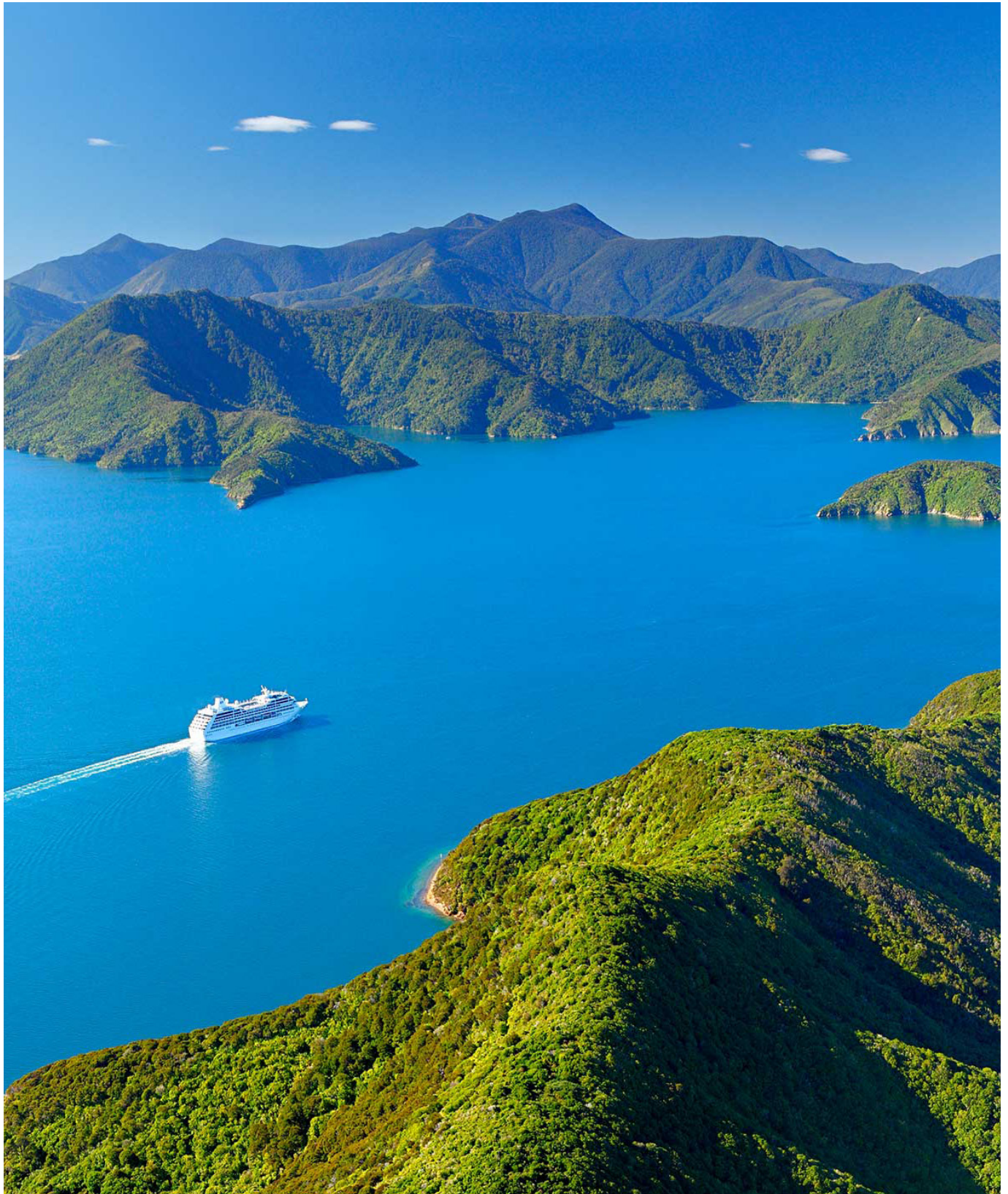
**3 MW/50 MWh**

World's first  
**Solar Hydropower Plant**,  
a **3 MW/50 MWh** facility  
that can store power  
for **17 hours**





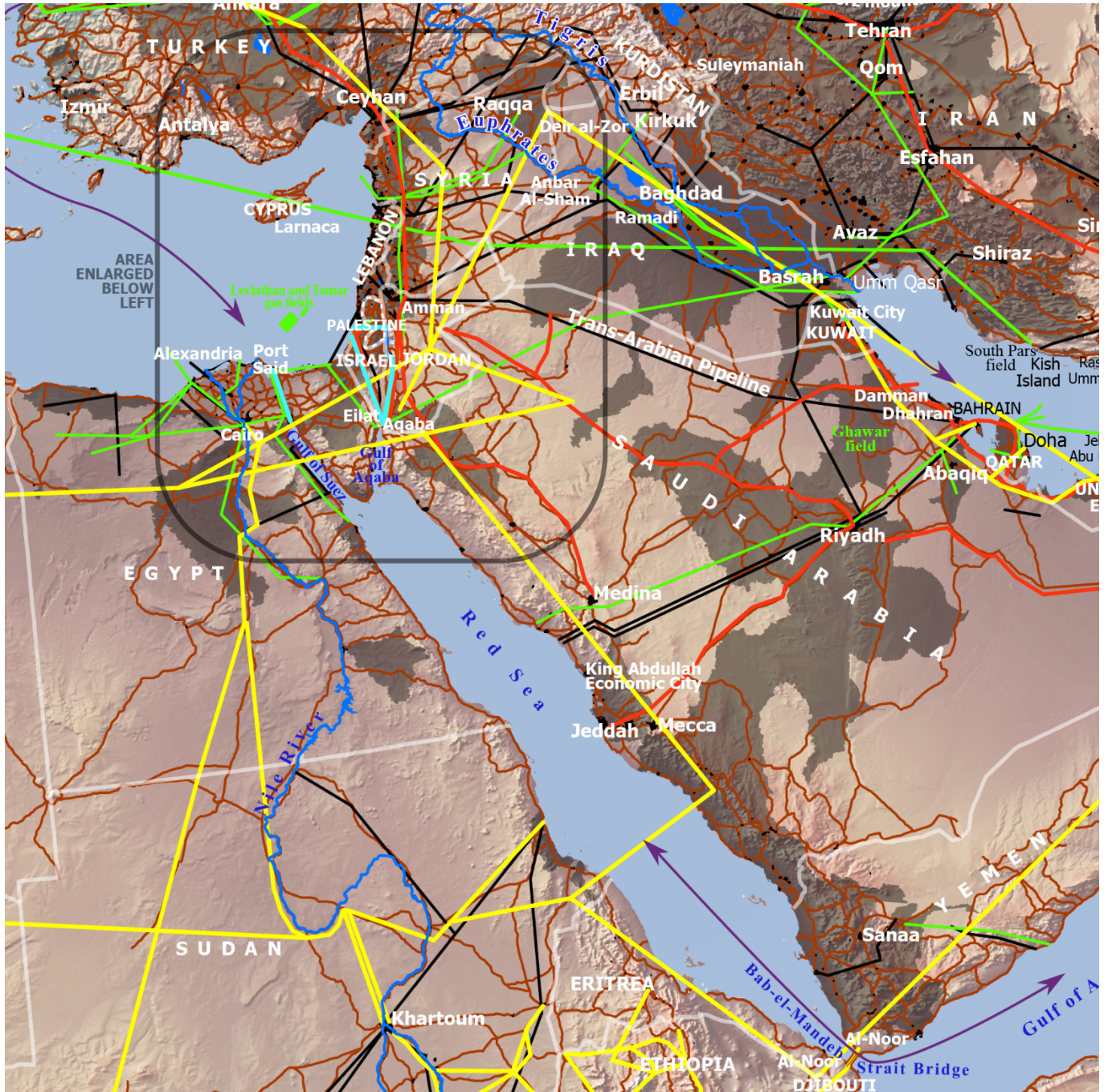
**New Zealand** is targeting energy production to be entirely from renewable sources by 2030. It also aims to make the public sector carbon neutral by 2025, while increasing cross-government partnerships to make New Zealand a global cleantech innovation hub. Notable efforts include allocating \$85 million from the Strategic Science Investment Fund towards cleantech, and instituting the Provincial Growth Fund partnership to spur growth in the hydroponics sector.





# IV SUSTAINABILITY IN ASCENDING ASIA

## GCC



As the GCC diversifies from oil and gas; fast plummeting renewable energy costs, novel desalination technologies, high-yield aquaponics, and low cost 3D construction technologies will drive the next wave of cleantech investments. With governments in the region looking to close the estimated \$100 billion annual financing gap across these sectors, lucrative investment opportunities will emerge.



Notable sectoral opportunities include:

## CLEAN ENERGY

The MENA region will have to install ~50 GW in solar power by 2030 -- over 3x the current capacity -- to reach its ambitious clean energy goals. Encouragingly, with improvements in solar panel efficiency, the GCC's average electricity cost from solar installations could drop to 1 cent per Kwh; 10x below the global average -- accelerating the spread of PV, CSP and roof-top solar power.

Saudi Arabia, which aims to add 3.7GW in solar power by 2030, will drive much of the growth in regional solar capacity. As will the UAE, which aims to increase solar installations fourfold, to 8.5GW by 2025, and Kuwait, which anticipates a 15% annual increase in solar power demand through 2025. Additionally, the IEA projects solar energy will power over 40% of seawater desalination in the GCC by 2040. Leading this transition will be the UAE -- which aims to switch to solar energy to power 100% of its desalination plants by 2030 -- and Saudi Arabia, home to the world's first large-scale solar desalination plant.

While new wind installations across West Asia declined by 8% in 2019 and 2020, the long-term outlook for the sector remains positive, with Saudi Arabia aiming to meet 20% of its energy demand from wind power by 2030, and Egypt -- where high average wind speeds make wind power among the most cost-competitive sources of power generation -- aiming to add 1.2GW in wind power by 2025.

Innovative carbon-offset mechanisms are also on the rise. In January 2021, Oman announced plans to develop a carbon exchange trading system. Saudi Arabia expected to launch a voluntary carbon trading platform led by the Saudi PIF and Tawadul.

## NOTABLE CLEAN ENERGY COMPANIES

### KARMSOLAR

Cairo-based off-grid solar energy integrator, targeting agricultural, and industrial sectors. **\$25 million raised over 3 rounds. Key investor is the San Francisco based EDF Renewable Energy.**

### ENERWARE

Dubai-based firm specializing in solar-diesel hybrid power generators. **\$2.5 million raised over four rounds, through crowdsourcing and debt-financing**

### RYSE ENERGY

Abu Dhabi-based firm specializing in off-grid solar and small wind turbine installation. Aims to start manufacturing wind turbines in the UAE.

### MASDAR CLEAN ENERGY

Abu Dhabi based cleantech arm of Masdar Capital. \$2.7 billion invested in solar and wind projects globally. Wind power projects in West Asia include the 117MW Tafila Wind Farm in Jordan.

### DESOLENATOR

AManufactures solar powered desalination devices that can produce ~15 liters of clean water a day. Headquartered in Amsterdam, with operations in the GCC. **\$360,000 raised over 2 rounds. Key investor is the EU's Executive Agency for SMEs. Pitch@Palace provides non-equity assistance.**

### METITO

Dubai-based firm with over 50 years of experience in water management. Key offerings are in intelligent water management solutions, with a focus on emerging markets. **Key investors include Gulf Capital**



# MOBILITY

While still nascent, MENA's EV market is forecast to grow by 15% per year, reaching \$84 million by 2026. EV growth trajectory could accelerate further as Kuwait completes the GCC's first city to serve EV manufacturers, potentially lowering regional EV costs significantly.

Over the short-term, EV growth will likely centre around UAE and Saudi Arabia, with Dubai incentivizing EV uptake by offering free charging, bonus warranties, discounted car registration, and toll exemptions, and Saudi Arabia reserving 5% of parking spaces for EVs, these economies. Additionally, EV sales could accelerate in Cairo as Egypt removes import duties on used EVs, and builds charging infrastructure in the city in collaboration with the EBRD.

## NOTABLE MOBILITY COMPANIES

### DIZARIA ENERGY

Cairo based electric vehicle charging service provider.  
Total funding not known. Main investor is ChangeLabs, UK

### WEE

Riyadh based electric scooter sharing platform.  
\$50,000 raised in seed funding from the MENA focused accelerator, MISK500.

### RABBIT

Cairo based e-scooter rental company.  
\$35,000 raised in pre-seed funding. Supported by Falak Startups.

### FENIX

Abu Dhabi based longer-term e-scooter rental firm.  
Raised \$5 million over 2 rounds, including \$3.8 million in the seed round - the largest pre-launch venture round in the UAE's history.  
Key investors include Maniv Mobility, Emkan Capital and Panthera Capital Ventures.





# GREEN CONSTRUCTION

The IFC estimates that demand for green construction across MENA could cross \$1 trillion by 2030. The UAE and Saudi Arabia are among the early adopters of green 3D printing technology, with Dubai constructing the world's first 3D printed office in 2016, and Saudi Arabia building a fully functioning house in 2018. Dubai plans to have a quarter of all buildings 3D-printed by 2030.

While adoption of autonomous manufacturing and 3D printing tech outside the UAE and Saudi Arabia has been limited, declining costs, and technological improvements could spur broader uptake.

## NOTABLE GREEN CONSTRUCTION COMPANIES

### MODULUSTECH

Dubai-based startup offering flat-packed houses that can be assembled in 3 hours by 3 workers using simple hand tools.

**\$200,000 raised in seed round.**

---

### CONCREATIVE

UAE's first industrial concrete 3D printing firm, set-up in collaboration with the paris-based tech company XtreeE.

---

### IMMENSA

Dubai-based additive manufacturing and 3D printing firm. Also developing nanocomposite copper additives.

**\$4.5 million raised in its seed round. Acquired Shaki3D and Laylabs; Saudi-based 3D printing startups.**





# FOOD AND AGRICULTURE

MENA remains highly dependent on food imports. While the low ratio of arable land, scarce groundwater, and high soil salinity limits output from traditional agricultural methods, growth opportunities in AgTech, notably hydro and aquaponic farming, and plant-based meat, remain. GCC's aquaponics sector is currently valued at less than \$50 million, MENA's plant-based meat and dairy products market was valued at just \$241 million in 2020. Reducing dependence on food imports using sustainable technologies could prove a \$40+ billion opportunity.

GCCs food delivery market is estimated at \$800 million. RedSeer Consulting forecasts satellite and cloud kitchens will account for 60-70% of the region's food delivery ecosystem.





## NOTABLE AGTECH AND CLOUD KITCHEN COMPANIES

### PROTEINEA

US and Egypt-based biotech company using insect larvae as fast growing, mini-biofactories to produce recombinant proteins. Has applications in antibiotics, vaccines, and aquaculture feed production.

**\$590,000 raised over 4 rounds. Key investors include 500 Startups, ChangeLabs and SOSV.**

---

### BADIA FARMS

GCC's first commercial high tech vertical farm. Supplies fresh fruits, vegetables, and herbs to top restaurants across the UAE.

**\$4m raised in seed round from an angel investor.**

---

### AQUAPONICS AI

Jordan-based software and app that provides libraries for fish, plants, and diseases as well as a platform for managing aquaponic systems.

---

### ARLENE

Company in Dubai that prepares ready made plant-based meals aimed at flexitarians.

---

### KITOPi

Dubai-based cloud kitchen firm operating over 60 kitchens across the GCC.

**\$504 million raised over four rounds. Notable investors include SoftBank, Chimera Investment and Nordstar.**

---

### CARBON CPU

A biotech startup in Saudi Arabia turning food waste into fatty acids for livestock nutrients.

**\$50k raised from the KAUST Innovation Fund.**

---

### EROEGO

UAE-based startup giving consumers access to soon to expire fresh groceries at affordable prices.

**In the beta-stage. Funding details not available.**



## BEAUTY, RETAIL AND FMCG

As the Boston Consulting Group highlights, a large share of GCC consumers have already begun or are considering buying eco-friendly products with natural ingredients and recyclable packaging. As demand for sustainably sourced FMCGs grows, MENA's organic cosmetics market is projected to grow to \$4-5b by 2022, with UAE likely emerging as a regional leader, given several department stores already have dedicated sections to clean beauty products.

Annual fashion sales across the GCC total ~\$50 billion. While there are few reliable estimates of the market size for sustainable fashion in the region, changing consumer attitudes will almost certainly spur growth of sustainable fashion over the medium-term.

## NOTABLE SUSTAINABILITY FOCUSED FMCG FIRMS

### PROJECT BYOUTY

GCC's first dedicated clean beauty e-commerce platform. Headquartered in Dubai. Funding details not known.

### SECRET SKIN

Dubai based e-commerce platform connecting consumers in the Middle East to sustainable brands around the world. Funding details not known.

### DGRADE

UAE-based SME that recycles PET bottles into yarn for high-quality sustainable clothing.

**Key investor is Emeraude International. Total funding not known.**

### ETUIX

UAE based firm using polyvinyl chloride from advertising posters to produce luxury purses, bags, and shoes. Funding details not known.

### ECOSOUK

West Asia's first zero-waste and fully circular shop focusing on homewares. Headquartered in Dubai. (Funding details not known.)

### TRIBE DUBAI

Dubai-based brand for ethically sourced home decor startup. The brand is connected to a network of 1000+ artisans spanning 25+ countries. (Funding details not known.)





As the United Nations Environment Programme highlights, green investments in ASEAN will have to increase 400% per year through 2030 as countries in the region look to build climate resilient, carbon-neutral economies. Encouragingly, for investors, this translates into a \$3 trillion opportunity -- a market 37x the size of the entire global green bond market in 2016.



Key sectoral opportunities include:

## ENERGY

ASEAN aims to boost the share of renewables to 23% of total primary energy supply. Much of the added capacity will be in solar power, with Singapore aiming to increase solar capacity by 4x to 1GW by 2030, Malaysia planning to install 9 GW of solar power by 2050, and Thailand, ASEAN's largest solar power producer, aiming to install an additional 6GW in solar capacity by 2036.

ASEAN is also expected to add 8.9GW in wind capacity by 2029. This will require \$14 billion in new investment. Offshore wind farms could play a significant role in countries like Vietnam, which aims to source 12% of its energy from offshore wind installations by 2035; potentially adding \$50 billion to its economy in the process.

Opportunities in energy storage tech also remain lucrative. Mordor Intelligence projects ASEAN's battery market to grow at over 10% per year between 2021-2026, to reach \$30 billion. Much of the growth will be driven by strong demand from regional electric vehicle manufacturers, and Southeast Asia's emergence as a global data center hub.

Additionally, as in the GCC, ASEAN has seen a rise in innovative carbon-offset mechanisms. Singapore aims to launch Climate Impact X -- an exchange to facilitate high-quality carbon credit trades among multinationals and institutional investors -- by the end of 2021. Indonesia aims to launch a pilot emissions trading system for the power and industrial sectors, which could be scaled to the national level by 2024.



# NOTABLE CLEAN ENERGY AND ENERGY STORAGE COMPANIES

## SUNSEAP

Singapore's largest solar energy solutions provider. Portfolio of pipeline and completed projects totals 2 gigawatt-peak across ASEAN.

**\$189 million raised over 8 rounds. Key Investors include UOB, ING Group, and ABC World Asia.**

---

## CLEANTECH SOLAR

Singapore based rooftop solar installation firm, with operations in India and SE Asia.

**\$125 million raised over 3 funding rounds. Key Investors include ING Group, and Shell.**

---

## SUPER ENERGY CORPORATION

Installed over 760 MW in solar power across Thailand. The firm is targeting 25% annual revenue growth over the medium-term.

---

## UPC RENEWABLES

Manilla based firm with a project pipeline of over 10 GW in wind and solar power across Asia. Operates 100+MW of wind projects in the Philippines

---

## VFLOW TECH

Singapore-based startup manufacturing long-lasting, high performance low-cost vanadium flow batteries for large scale energy storage.

**Seed funding from Entrepreneur First. Amount not known.**

---

## OYIKA

Singapore based firm developing battery swap/charging infrastructure for electric vehicles.

**\$100m raised in venture round. Investors include Yinson Holdings, Massa Group, and rodVENTURE.**

---

## INVOLT

Singapore-based firm developing next-generation super-capacitors using cost-effective, safe and environmentally-friendly materials.

**Investors include SG Innovate and Entrepreneur First. (Total funding not known.)**





# MOBILITY

With Indonesia signing a US\$9.8 billion deal with LG to build the world's first integrated electric vehicle battery manufacturing complex, regional EV prices could drop significantly over the medium-term. Lower costs, and improved charging infrastructure will likely spur the growth of EV sales across ASEAN.

Singapore and Thailand could see an especially sharp uptick in EV sales, as Singapore phases out the sale of petrol vehicles by 2040, while offering EV tax rebates, and installing over 60,000 EV charging ports by 2030; and with Thailand installing 10,000 charging stations by 2025, increasing to 80,000 by 2035.

The outlook for Southeast Asia's electric bike and scooter sector also remains positive. Mordor intelligence projects the sector to grow 4-fold to reach \$2.5 billion between 2017-2022.



## NOTABLE MOBILITY COMPANIES

### VINFAST

Part of Vietnam's Vin Group, VinFast aims to launch locally manufactured EVs in Asia, Europe and North America by 2022. VinFast has 3,000 buses operating across Vietnam. The firm plans to build 2,000 charging stations by the end of 2021.

### SCORPIO ELECTRIC

Singapore based high performance electric motorcycle manufacturer. ~\$8 million raised over 2 rounds of funding. Key investor is Singapore based Eurosports Global.

### GETEEVEE

Manila-based mass transit EV manufacturer. Fleet of twenty-seater air conditioned buses with a 100km range operate in Manila and Davao. Additional rollouts planned. Funding details not known.

### BEAM

Singapore based firm manufacturing and renting e-scooter. Logged over 10m rides as of June 2021.

**\$33 million raised over 5 rounds. Key investors include Sequoia India, InnoVen Capital, and Hana Financial.**

### GRABWHEELS

Micro mobility arm of Grab, focusing on electric scooters for short distance travel.

**\$30 million raised. Taiwan based Kymco is the lead investor.**

### DATBIKE

Vietnam based electric motorbike manufacturer.

**\$2.6 million raised in seed round. Jungle Ventures is the lead investor.**





## GREEN CONSTRUCTION

As the IFC highlights, green buildings present a \$16 trillion investment opportunity across East Asia-Pacific over the next decade; with green offices and multi-unit residential buildings driving over half the investment demand.

For ASEAN, notable among green building technologies is autonomous manufacturing (AM), which has the potential to create more than \$100 billion in value across the region. While the technology is still nascent, Singapore has emerged as an early mover, with the government investing \$380 million in AM.

Southeast Asia's data centre and co-location market is forecast to grow at 13% per year through 2024, reaching a valuation of \$3.5 billion. Much of the opportunity for greening data centres will be in Singapore, which currently accounts for 60% of Southeast Asia's data centre market.

## NOTABLE GREEN CONSTRUCTION COMPANIES

### LUMIZEN

Singapore-based green-building design and consultancy firm with a focus on wireless LED lighting systems. (Funding details not known.)

### 3D INFRA

Singapore-based metal additive design and printing startup.  
**\$1 million raised. M-Venture Partners is the lead investor.**

### SPAREPARTS 3D

Startup 3D printing spare parts on-demand for home appliances. Headquartered in Paris, with operations in Singapore and Malaysia.  
**\$365,000 raised from Seedrs.**

### ECOLINE SOLAR

Specializes in solar thermal hybrid air conditioning technology for commercial and industrial operations.

### SEMBCORP

Clean energy and water solutions for industrial and municipal use. Is providing solar power for part of Facebook's new regional data centre.  
**\$30m raised from DBS Bank in 2020 in a post-IPO debt round.**



# FOOD AND AGRICULTURE

While water stress across ASEAN is currently low, a fast growing population, rising living standards, and dated agricultural infrastructure could exponentially increase water and food scarcity.

Recognizing these risks, as well as the opportunities a more efficient agricultural sector offers, the ADB has launched the ASEAN Catalytic Green Finance Facility, which aims to invest \$3 billion in green infrastructure across the region, including in vertical farming. Agtech innovation also continues at the national level. As Singapore aims to produce 30% of its own food supply by 2030, it has allocated \$40 million toward agtech research in 2020 alone. Thailand is emerging as a regional leader in rooftop farming and mixed-use skyscrapers with open-air farms. The 22,000 sq m facility at Thammasat University in Bangkok is Asia's largest urban rooftop farm.

Investments in the region's alternative protein sector also continue to grow, rising 3x to \$3.1 billion between 2019 and 2020. With Singapore becoming the first country in the world to allow the sale of cell-based meat, its success could spur others to follow, potentially helping ASEAN emerge as a global leader in cell-based meat production.

Southeast Asia's food delivery market is forecast to grow 4x to \$20 billion by 2025, as cloud kitchens lower barriers to entry in food services.

## NOTABLE AGTECH AND CLOUD KITCHEN COMPANIES

### PLENTO

Singapore-based plant based and insect based protein company.

**Key investors include Brinc, Bugsolutely and Artesian Capital Management. Total funding not known.**

### SHIOK MEATS

Singapore-based cellular aquaculture, and cell-based meat and seafood company.

**\$20 million raised from Y Combinator, Aqua Sparks, and EnterpriseSG among others. Currently in R&D phase. Commercialization likely by 2022.**

### CRICKET LAB FARM

Thai startup focusing on low cost, high-protein cricket-flour production. Funding details not known.

### JOLLIBEE

Largest fast-food chain in the Philippines. Expected to invest ~\$140 million in cloud kitchens.

### GRUB CYCLE

Malaysia-based firm that buys groceries that would otherwise be thrown out and sells them to underprivileged communities at a low price.

**Key investors include 1337 Ventures and Mountain Partners.**

### UGLYFOOD

Singapore-based startup specializing in converting organic waste into high value products and materials.

**Seed funding target: \$1 million by August 2021.**

### OKLIN

Thailand-based firm selling machines that can turn food waste to compost within 24 hours, reducing food waste by upto 90%.



## BEAUTY, RETAIL AND FMCG

With 80% of Southeast Asia's consumers preferring to buy from companies that invest in mitigating their environmental impact, nearly half of Singapore's consumers willing to pay up to 50% more for sustainably made clothing, and 87% of Southeast Asia's Gen Zers preferring to purchase beauty products from ethical brands, the demand for sustainability in ASEAN's beauty, FMCG and retail sectors remains strong.

FMCG spending in Southeast Asia will likely rebound after the sharp decline in 2020. As consumers continue to favor local brands (local brands account for 62% of FMCG sales across Asia), and as the willingness to pay a premium for green products grows, there will be lucrative opportunities for domestic sustainability focused FMCG firms to corner a larger share of ASEAN's household goods market.



## NOTABLE SUSTAINABILITY FOCUSED FMCG FIRMS

### OASIS SKIN

Singapore-based vegan skincare startup focusing on organic personal care products, and beauty products. Funding details not known.

### SIGI SKIN

Beauty brand focusing on vegan, superfood-infused, and waterless skin care products in Singapore. Funding details not known.

### STYLE THEORY

Singapore-based fashion rental service that allows consumers to rent clothing.

**\$15 million raised over 2 rounds. Key investors include Softbank and Alpha JWC Ventures.**

### MORELOOP

Thai company that promotes the use of deadstock fabric through connecting factories with buyers for their waste fabric.

### THE HIVE BULK FOODS

Malaysia's first and most extensive sustainable household brand. Received a UN award for sustainability in 2017. (Funding details not known.)

### REFILLABLES

Central Vietnam's first refillable concept store for eco-friendly household items free of harmful chemicals. The startup focuses on reducing plastic waste by asking customers to bring their own containers for refilling household items including liquid soap, and detergents. (Funding details not known.)



# VI METITO: SUSTAINABILITY INVESTING, BUILDING A WORLD LEADER IN WATER

## SUMMARY

Largest privately held water engineering and concessions company based in the GCC with operations spanning 25 countries across the MENA and Asia

## INVESTMENT STRUCTURE

GC Ownership	60%
Closing Date	November 2006
Industry	Utility
Head Office	UAE
CEO	Mutaz Ghandour



Since Gulf Capital's investment in 2006, Metito has expanded both organically and inorganically across Africa and Asia and become a world leader in the water industry across emerging markets. Metito's growth was accomplished while maintaining a keen focus on not only growth opportunities and business fundamentals but also the needs of customers, employees, and the communities they serve.

In 2021, Metito was named the most impactful water company in the World by Capital Finance International. Throughout challenging times, brought on by the COVID-19 pandemic, Metito's growing impact on water and energy sustainability didn't waiver. The award celebrates the company that showed the most resilience and tireless efforts towards addressing the pressing challenges of water scarcity and security while growing steadily, opening new markets, providing job opportunities, and upskilling talent to deliver long-term, world-class quality practice, and deliverables.

Metito's ongoing commitment to support the UN's SDGs, particularly, goal 6 – clean water and sanitation, goal 7 – affordable and clean energy, goal 11 – sustainable cities and communities, and goal 13 – climate action, were all applauded in the judge's report reflecting on the impact Metito is having on circular economy and not just the water sector in key markets around the world.



# VII CONCLUSION

---

Staving off the most disruptive socio-economic impacts of climate change will require over \$2 trillion in sustainability focused investments annually through 2035. Much of this investment will centre around Asia, home to a ~2.5 billion strong consumer base that will drive nearly half of global growth over the next decade.

Within this greater Asia, the GCC and Southeast Asia are two ascending regions with rising youth populations that are rapidly undergoing technological, socio-economic, and attitudinal shifts, driven by a growing share of consumers voting for sustainable brands with their dollars, dramatically reshaping the risk-reward equation for sustainability focused investments in the process.

Encouragingly, the demand for sustainability continues to grow across this region, with up-scaling, rentals, and second-hand ownership models becoming increasingly popular, especially among Asia's 822 million working age youth.

As these economy-wide shifts towards sustainable models of value-creation gather momentum, Ascending Asia will offer multi-billion dollar investment opportunities in nearly every sector; from food production to e-mobility, FMCGs, and offshore wind, and solar power. As forward looking governments in the region look for greater private sector participation to close the funding gap, it becomes increasingly difficult to imagine a global portfolio that doesn't include strong exposure to green investments in Ascending Asia.





# KEY SOURCES

International Finance Corporation (2020) 'Green Buildings: A Financial and Policy Blueprint for Emerging Markets'

International Monetary Fund, World Economic Outlook Database (April 2021)

Jay Famiglietti 'A Map of the Future of Water,' Pew Research, 3rd March 2019

Laura Saunter and Jemma Shin (2019) 'Gen Z: Building New Beauty What the next-generation consumer wants from your brand and your products,' WGSN - Ascential

McKinsey Global Institute 'The Trailblazing consumers in Asia Propelling Growth,' 7th June 2021

National Oceanic and Atmospheric Administration (2020), Billion Dollar Climate and Weather Disasters

NITI Aayog and the Rocky Mountain Institute (2019) 'India's Electric Mobility Transformation: Progress to Date and Future Opportunities'

Nikkei staff writers 'Japan aims for nearly 40% renewable energy by fiscal 2030,' Nikkei, 17th July 2021

Parag Khanna (2019) The Future is Asian (Simon & Schuster)

Roland Irle, 'Global EV Sales for 2021 H1,' EV Volumes

Sambit Mohanty and Fred Wang 'Asian countries accelerate hydrogen plans with policies and projects,' S&P Global Platts, 1st June 2020

Tatsatom Gonçalves & Debbie Weyl '\$13 trillion: China's expected construction spending by 2030. Will some go to zero carbon buildings?' GreenBiz, 6th November 2019

Tech Collective 'These startups are combatting the food wastage crisis in Southeast Asia,' KrAsia, 7th June 2019

The Long View: How will the Global Economic Order Change by 2050?, PriceWaterhouseCoopers, February 2017

United Nations Department of Economic and Social Affairs (2019) 'World Population Prospects'

United Nations Intergovernmental Panel on Climate Change 'Sixth Assessment Report: Climate Change 2021: The Physical Science Basis,' 9th August 2021

Metito Sustainability Report 2020-2021, Final Production Version



[www.gulfcapital.com](http://www.gulfcapital.com)