List of Supplementary materials

Supplementary Note 1 CDR issues

We have to admit that this study could not or did not intend to resolve all CDR shortcomings that mentioned in chapter 12 of WGIII of AR6[1]. They are at least 1) obstruct near-term emissions reduction efforts, 2) might lead to an overreliance on technologies that are still in their infancy, 3) could overburden future generations, 4) might evoke new conflicts over equitable burden-sharing, 5) could impact food security, biodiversity or land rights, 6) might be perceived negatively by stakeholders and broader public audiences. We further added 7) ultimate sustainability issue beyond 2100. For 3), 5) and 7), we directly addressed within the context of model output. For 1), 2) and 6), these are more or less related to how the society, individual agents, policy makers or stakeholders would react, make actions and/or perceive the IAM scenario information and probably difficult to be addressed within this study. As we stated in the discussion section, we leave the issue related to equity concerns 4) for the future studies because there are equity concerns that can be seen in general climate change mitigation scenarios. Hopefully this can be addressed in the near future.

The temperature overshoot is also remaining which would further impose the risk of climate change impacts[2].

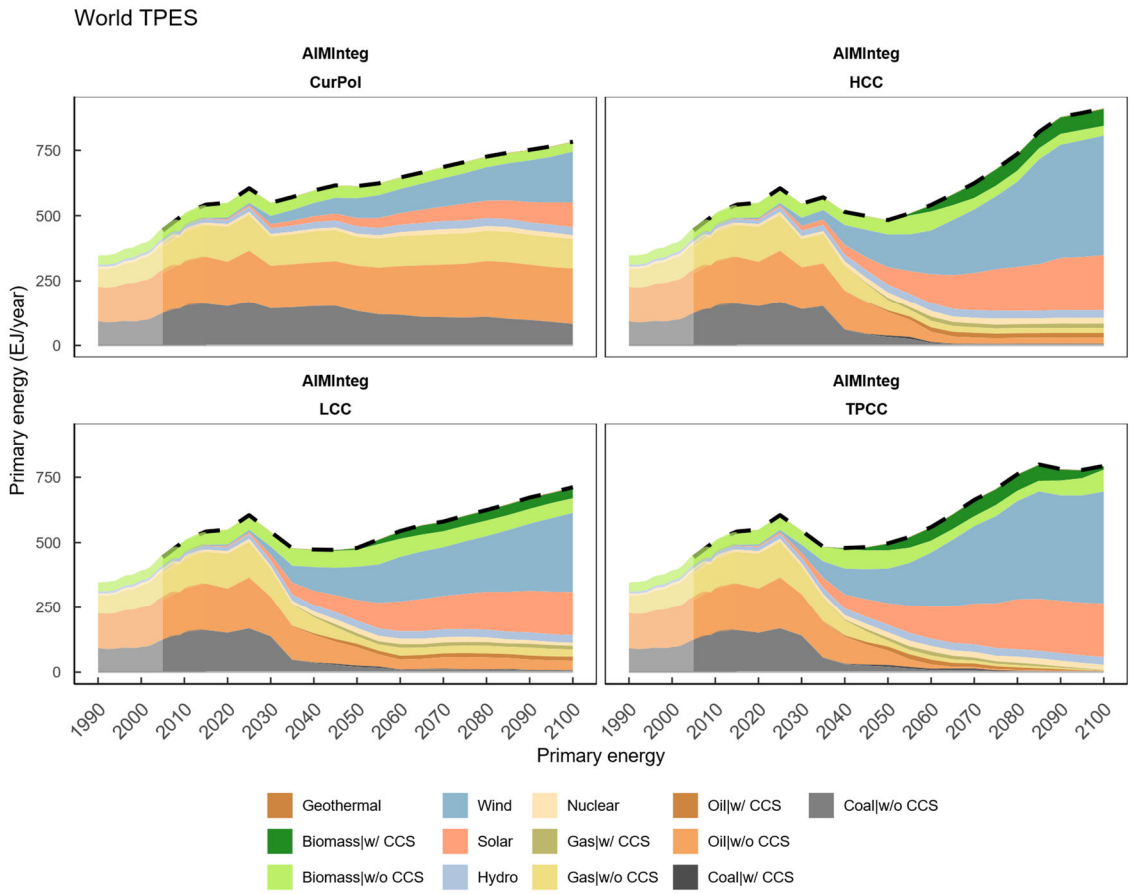
Supplementary Note 2 Sensitivity analysis

To assess the uncertainty and sensitivity of the TPCC results to key assumptions, we conducted several additional scenario experiments. The main purpose was to evaluate how the system behaves—and how overall feasibility is affected—when subject to stress conditions that make climate-change mitigation more challenging. Specifically, we examined three sensitivity cases: (a) Delayed policy action, in which climate policies are not implemented until 2030 (TPCC_del); (b) Slower technological cost reduction, assuming 1.5 times higher costs for DAC and hydrogen technologies (TPCC_highHyd, TPCC_highDAC); and, (c) Restrictions on CDR technologies, limiting the availability of BECCS and enhanced weathering (TPCC_NoBECCS, TPCC_NoEW). As shown, indicators related to the physical dimensions of the energy system, CCS, and agricultural or land-use sectors remain largely unchanged across all sensitivity cases (**Supplementary Figure 11**). The economic burden would be slightly responding due to the technological cost increases and unavailability of the CDRs yet structural characteristics of energy supply and emissions remain broadly stable due to limited alternative options. Similarly, restricting CDR technologies leads to a comparable increase in economic burden. Overall, these sensitivity analyses yield broadly consistent conclusions, indicating that although cost and energy requirements vary under stressed conditions, the fundamental feasibility characteristics and system responses remain robust across the tested assumptions.

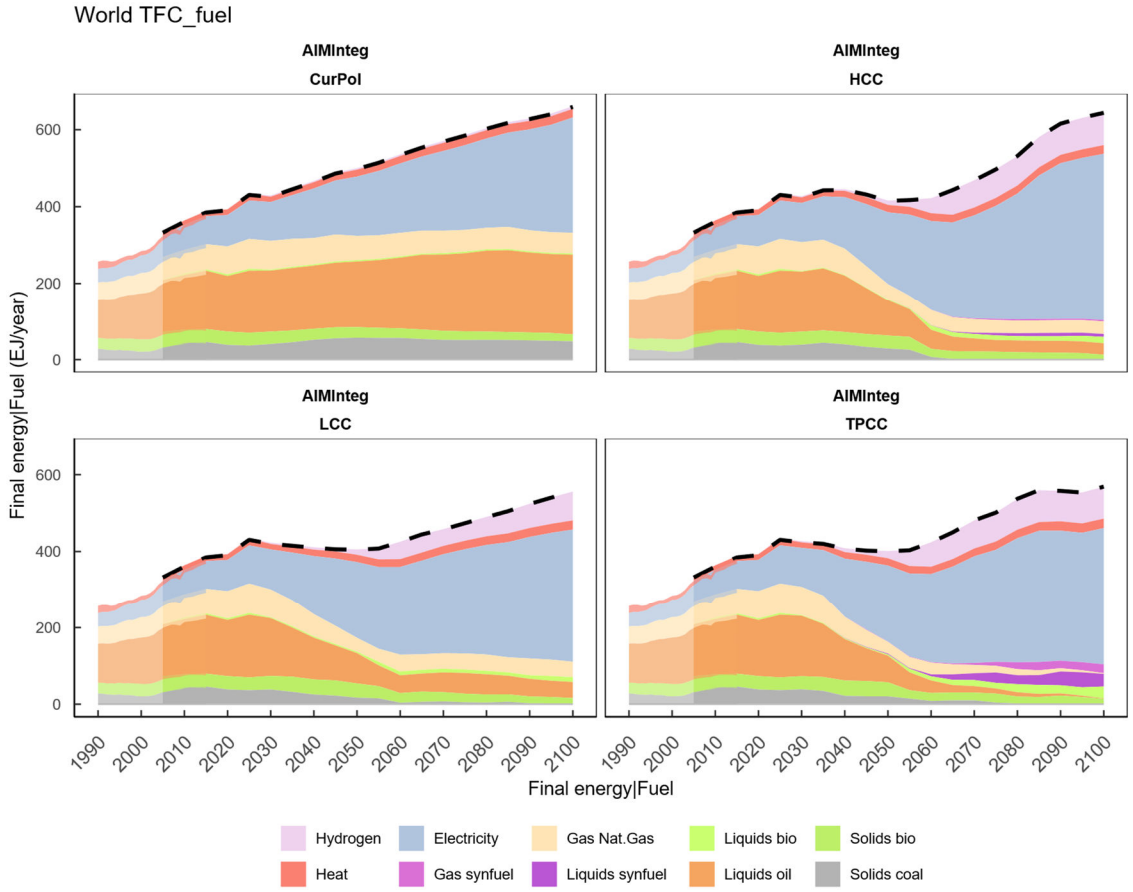
Supplementary Note 3 Interpretation of feasibility assessment

The evaluation of feasibility in this study draws extensively on the frameworks used in the literature[3, 4]. However, while these previous studies assessed feasibility using a composite index, we did not adopt such an aggregate approach here. Instead, we present and discuss individual indicators separately. The purpose of this study was to propose a new mitigation pathway and to identify where the main challenges lie. From this perspective, analyzing individual indicators provides a more informative understanding than using a single aggregated score. It should also be noted that, for several of the indicators, clear quantitative thresholds do not exist and the boundaries are based on expert judgement. We interpret these thresholds as being relatively conservative; therefore, an indicator classified as showing a high challenge does not necessarily imply infeasibility. We leave the interpretation of these results to the reader.

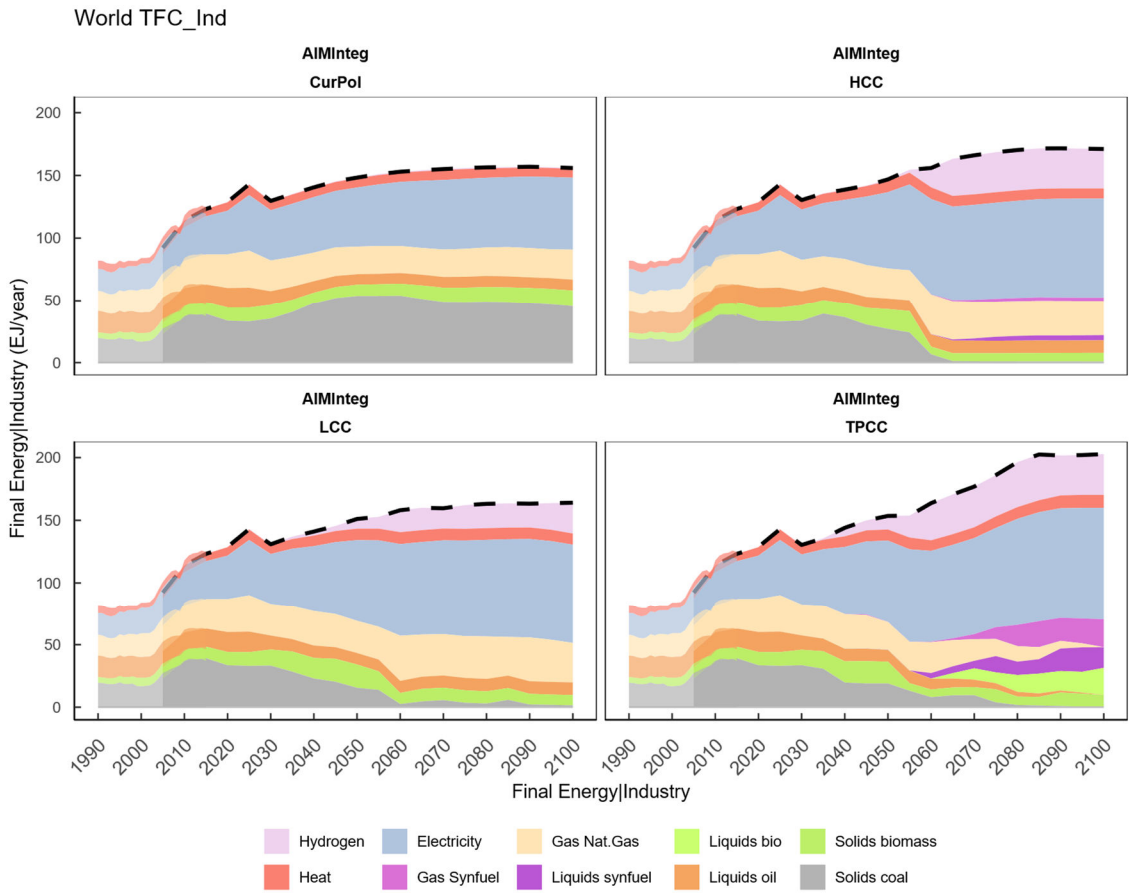
Supplementary Figures



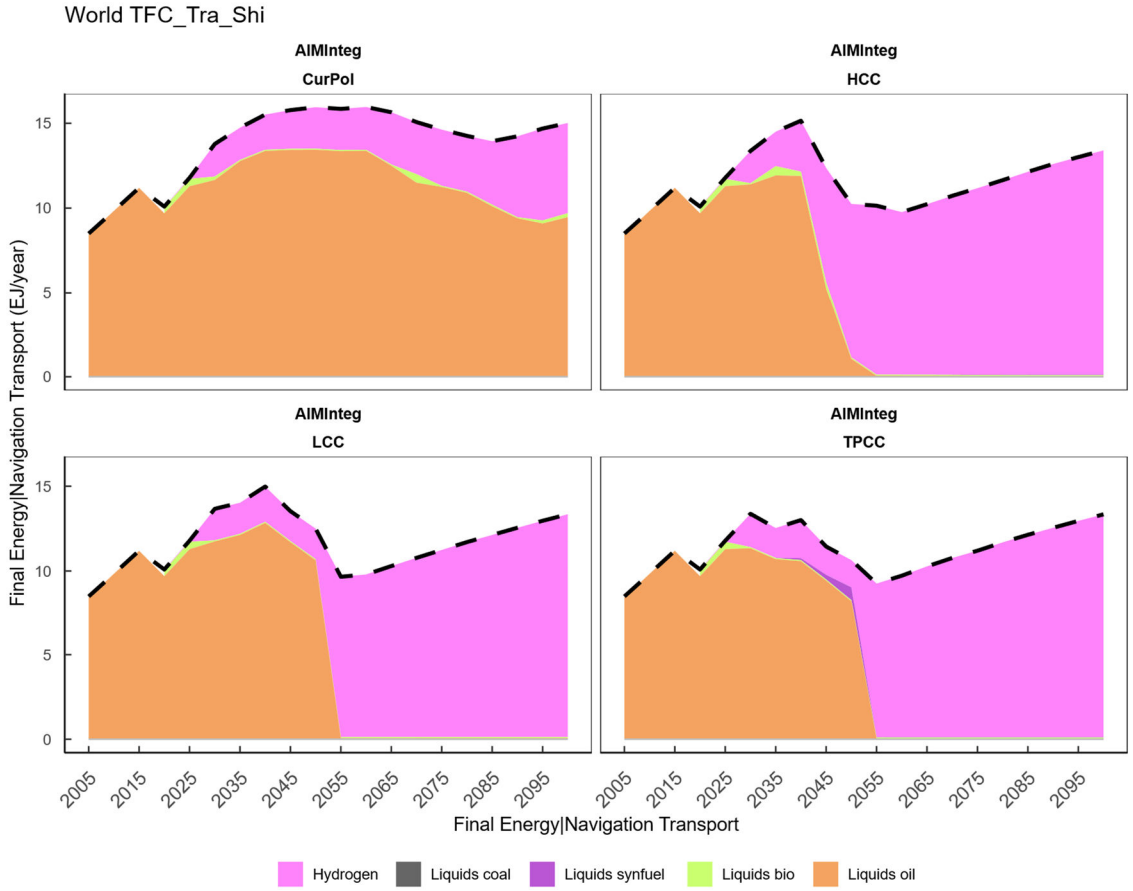
Supplementary Figure 1 Primary energy supply by energy sources for four main scenarios.



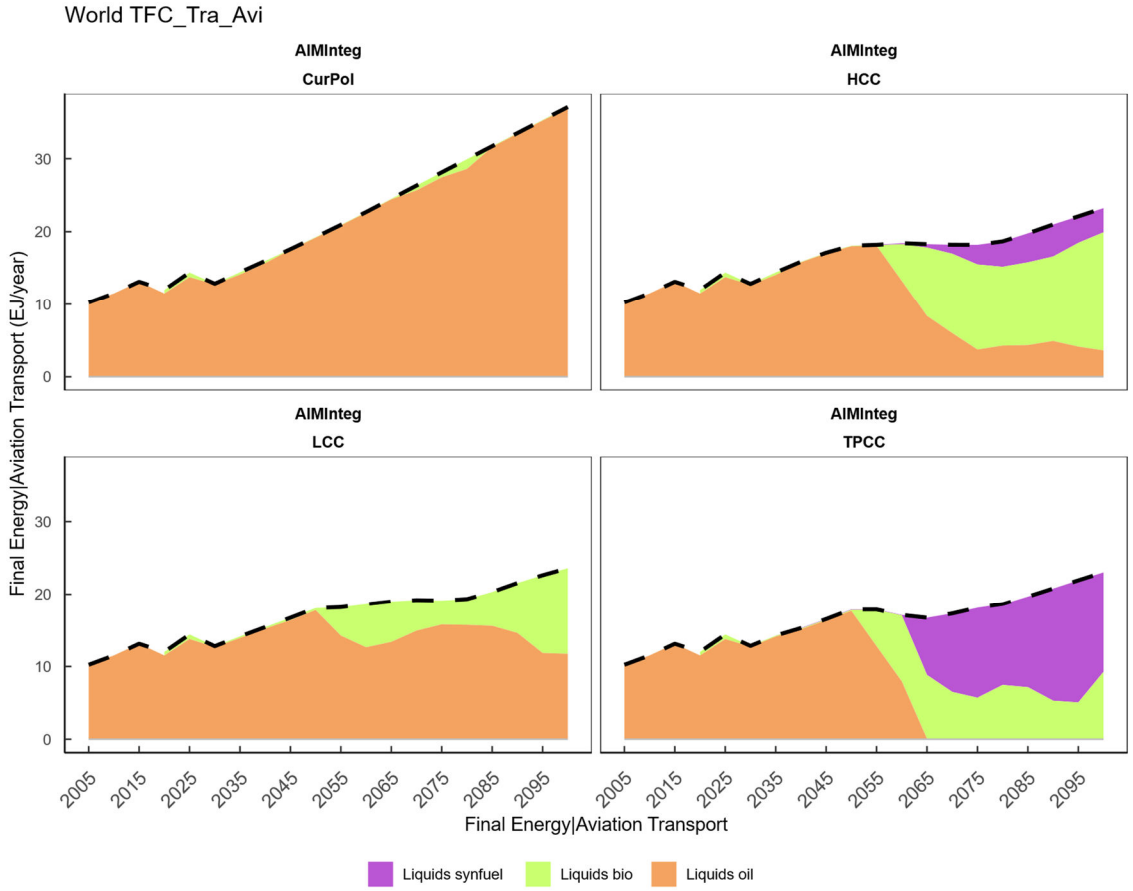
Supplementary Figure 2 Total final energy consumption by energy carriers.



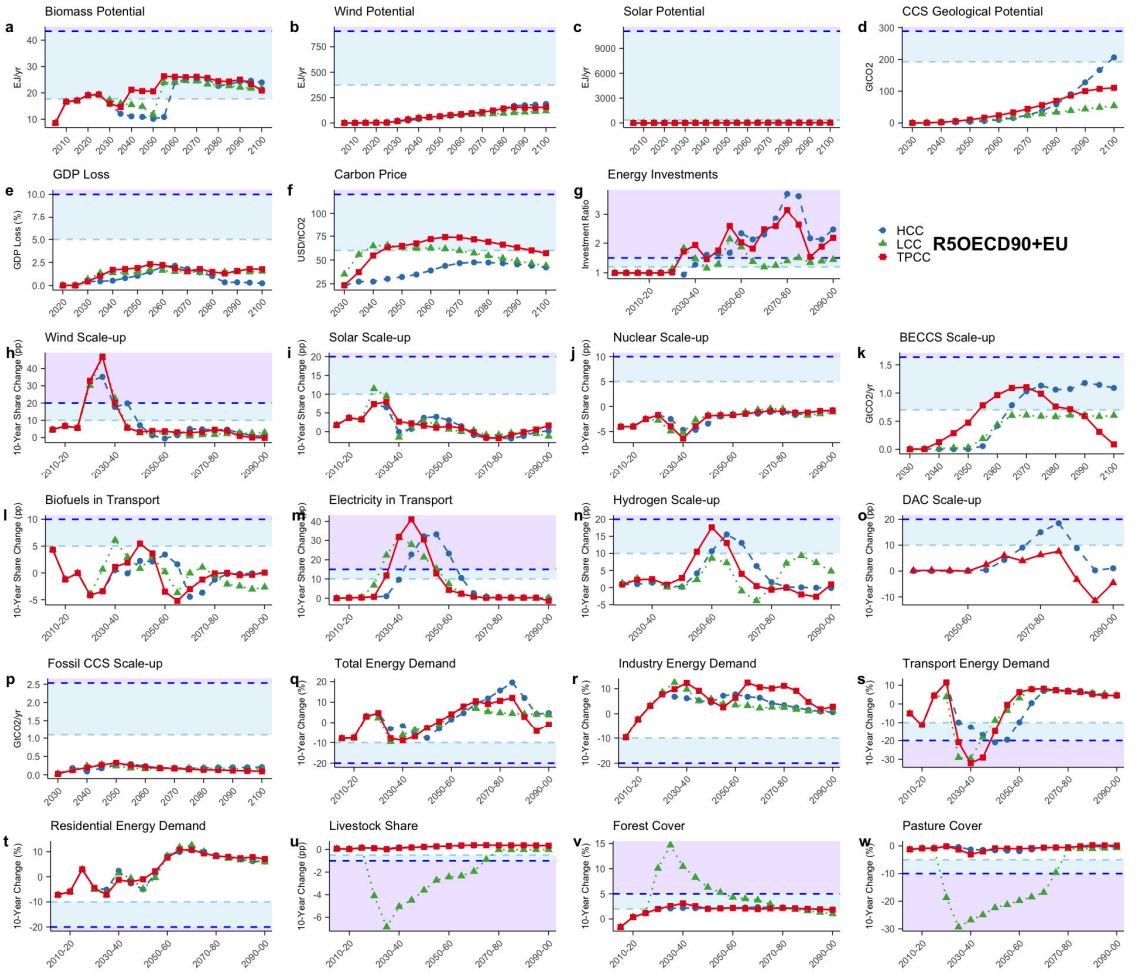
Supplementary Figure 3 Final energy consumption in industrial sector by energy carriers.



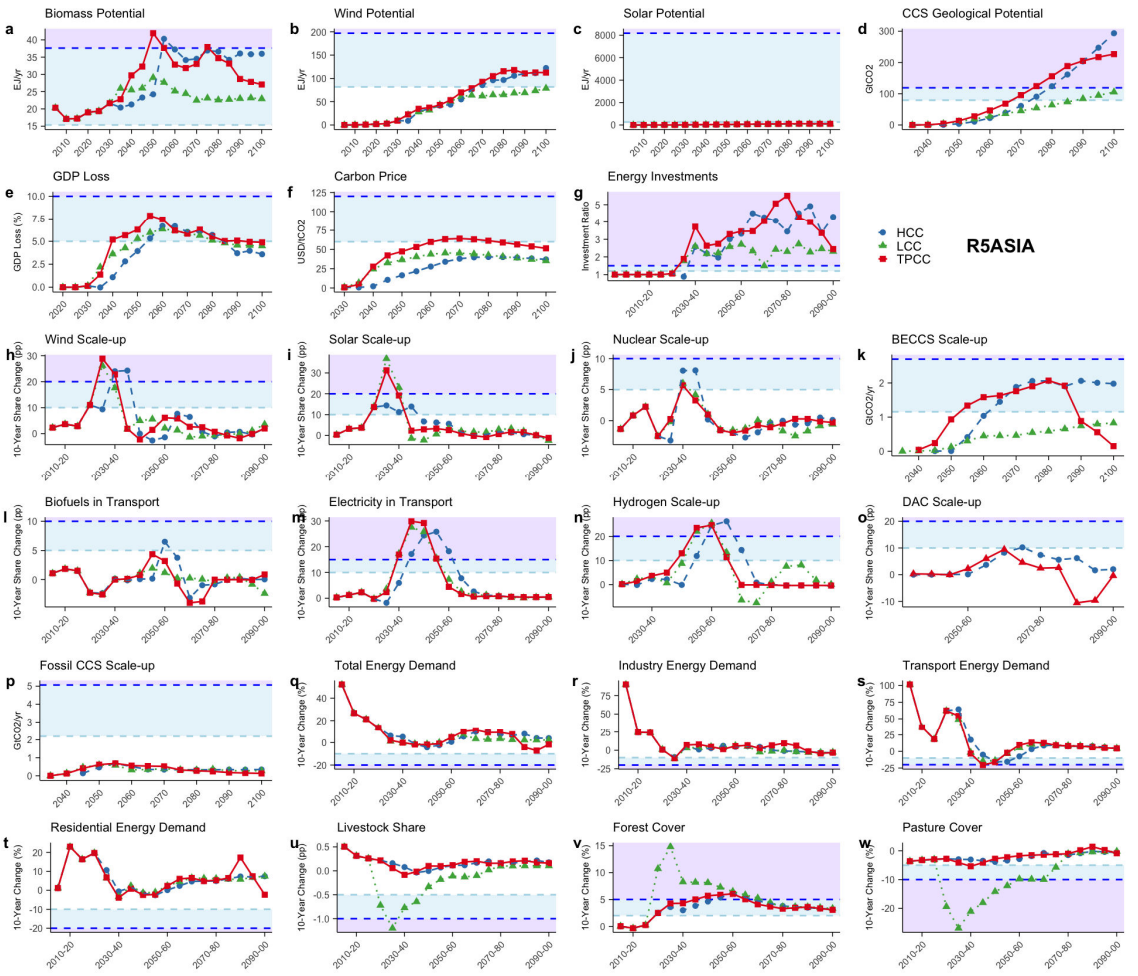
Supplementary Figure 4 Final energy consumption in shipping (part of transportation sector) by energy carriers.



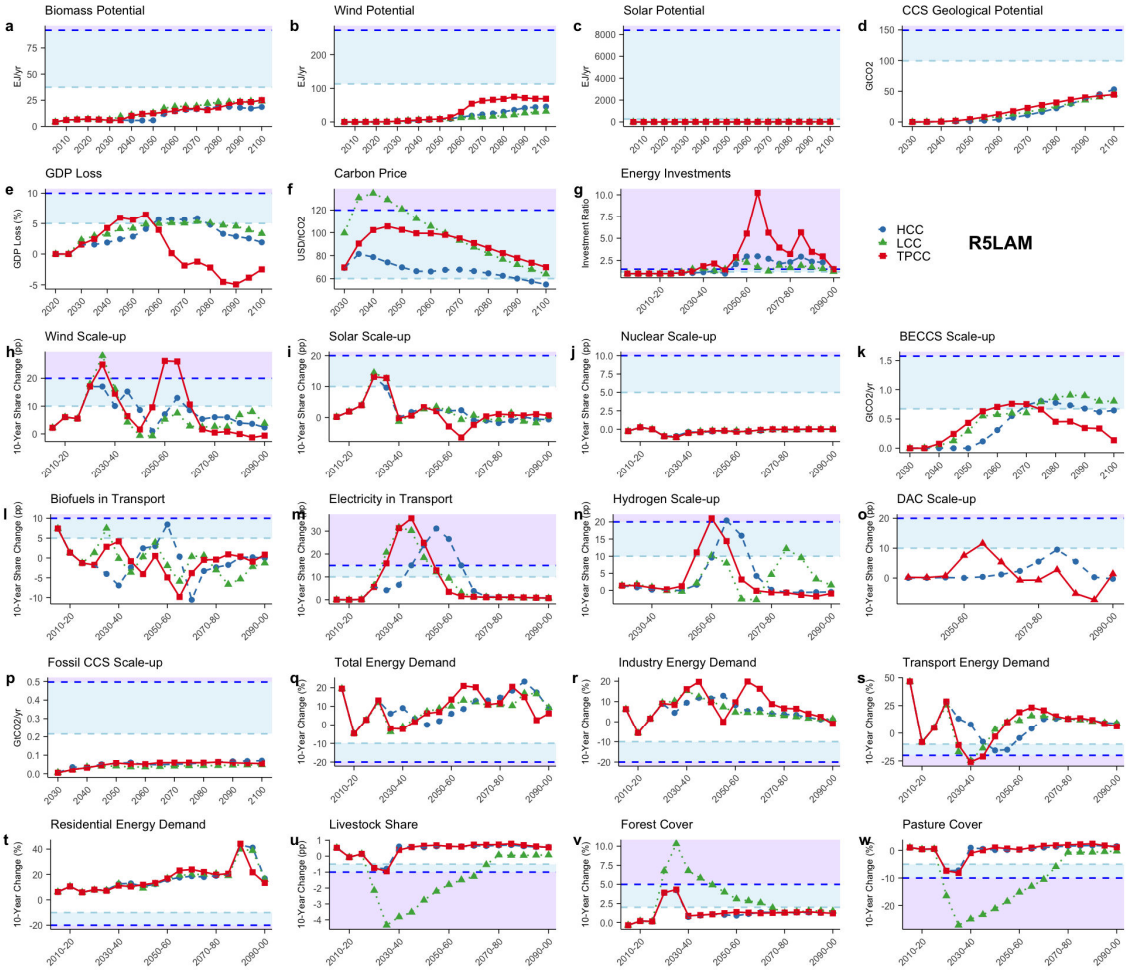
Supplementary Figure 5 Final energy consumption in aviation (part of transportation sector) by energy carriers.



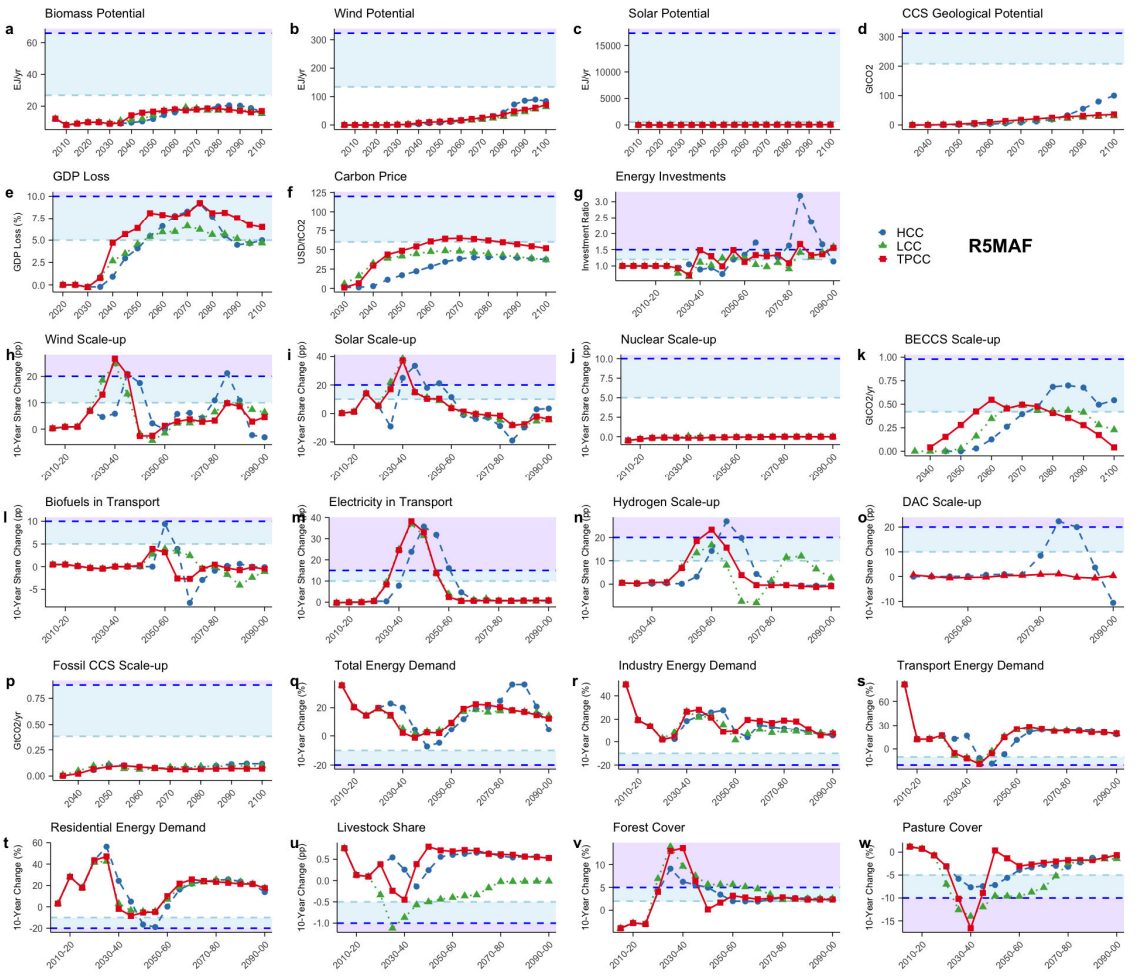
Supplementary Figure 6 Feasibility challenges assessment across all indicators for R5OECD90+EU (OECD and EU) region. Each panel represents the following indicators: Biomass/Wind/Solar/CCS (a–d); GDP loss (e); Carbon price (f); Energy investments (g); Wind/Solar/Wind/BECCS/Fossil CCS scale-up (h–l); Biofuels/Electricity in transport scale-up (m,n); Hydrogen/DAC scale-up (o,p); Decline in total/transport/industry/residential energy demand (q-t); Decline of livestock share in food demand (u); Forest cover increase (v); and Pasture cover decrease (w). Light blue and purple shaded ranges indicate medium and high levels of feasibility concern, respectively.



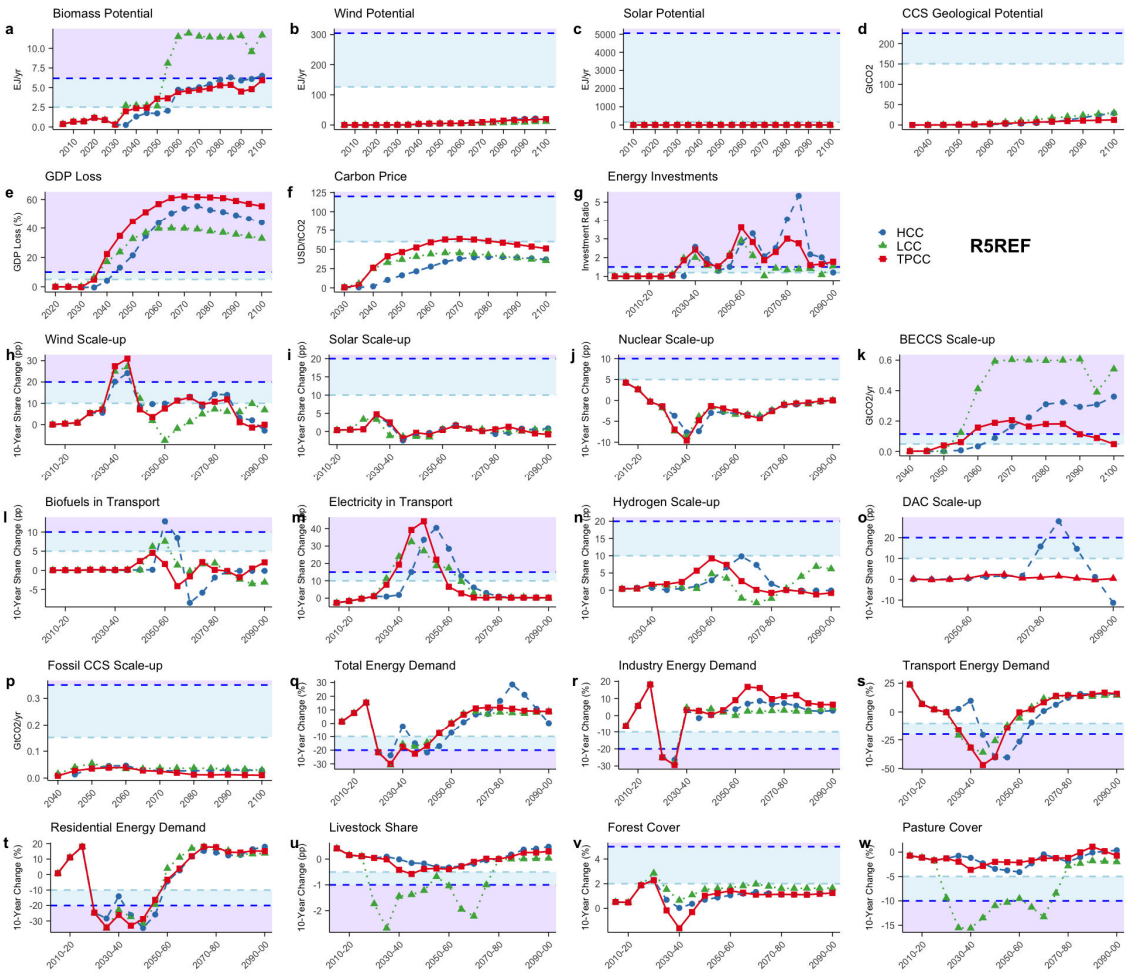
Supplementary Figure 7 Feasibility challenges assessment across all indicators for R5ASIA (Asian) region. Each panel represents the following indicators: Biomass/Wind/Solar/CCS (a–d); GDP loss (e); Carbon price (f); Energy investments (g); Wind/Solar/Wind/BECCS/Fossil CCS scale-up (h–l); Biofuels/Electricity in transport scale-up (m,n); Hydrogen/DAC scale-up (o,p); Decline in total/transport/industry/residential energy demand (q-t); Decline of livestock share in food demand (u); Forest cover increase (v); and Pasture cover decrease (w). Light blue and purple shaded ranges indicate medium and high levels of feasibility concern, respectively.



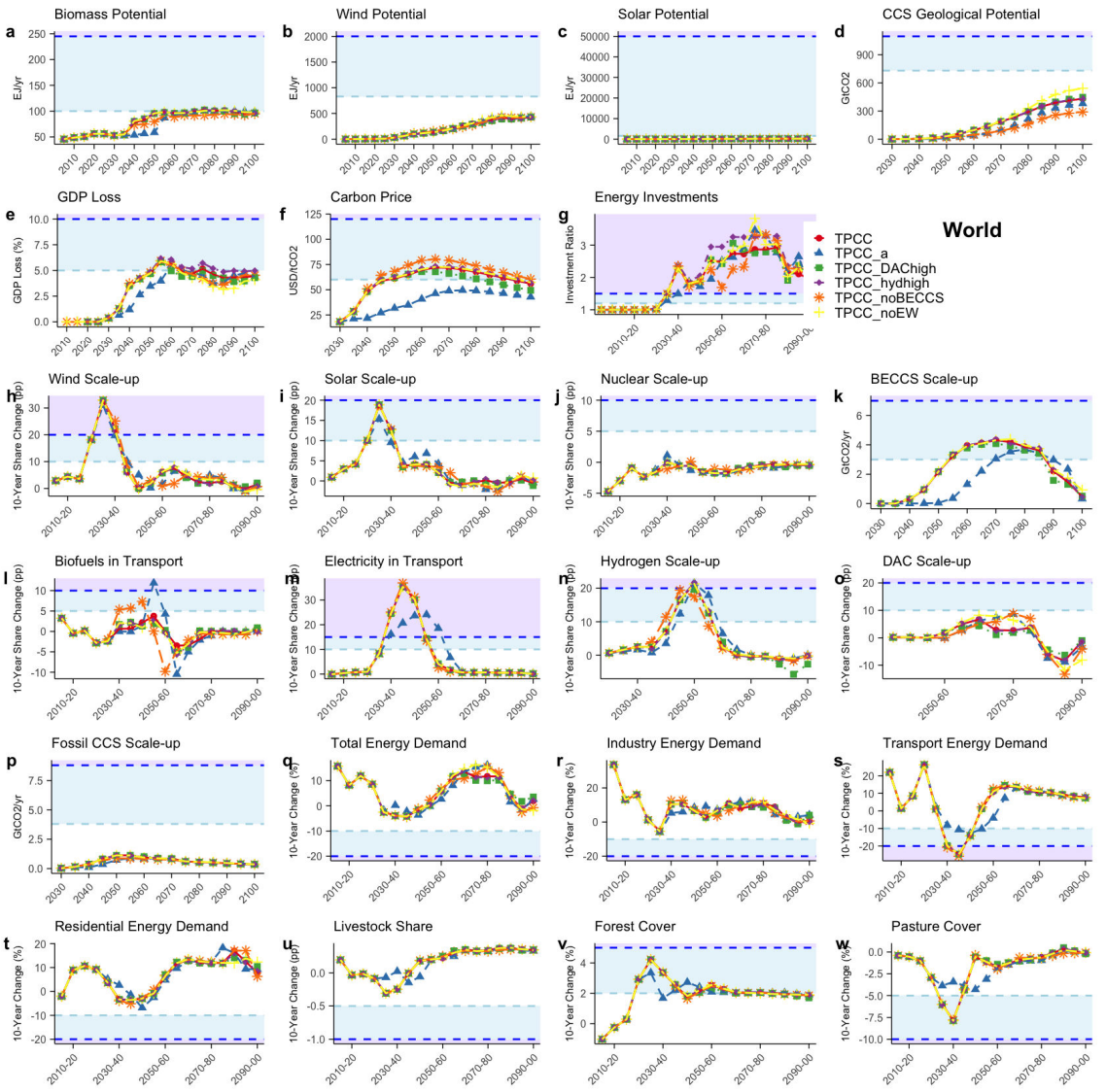
Supplementary Figure 8 Feasibility challenges assessment across all indicators for R5LAM (Latin America) region. Each panel represents the following indicators: Biomass/Wind/Solar/CCS (a–d); GDP loss (e); Carbon price (f); Energy investments (g); Wind/Solar/Wind/BECCS/Fossil CCS scale-up (h–l); Biofuels/Electricity in transport scale-up (m,n); Hydrogen/DAC scale-up (o,p); Decline in total/transport/industry/residential energy demand (q-t); Decline of livestock share in food demand (u); Forest cover increase (v); and Pasture cover decrease (w). Light blue and purple shaded ranges indicate medium and high levels of feasibility concern, respectively.



Supplementary Figure 9 Feasibility challenges assessment across all indicators for R5MAF (Middle East and Africa) region. Each panel represents the following indicators: Biomass/Wind/Solar/CCS (a–d); GDP loss (e); Carbon price (f); Energy investments (g); Wind/Solar/Wind/BECCS/Fossil CCS scale-up (h–l); Biofuels/Electricity in transport scale-up (m,n); Hydrogen/DAC scale-up (o,p); Decline in total/transport/industry/residential energy demand (q-t); Decline of livestock share in food demand (u); Forest cover increase (v); and Pasture cover decrease (w). Light blue and purple shaded ranges indicate medium and high levels of feasibility concern, respectively.

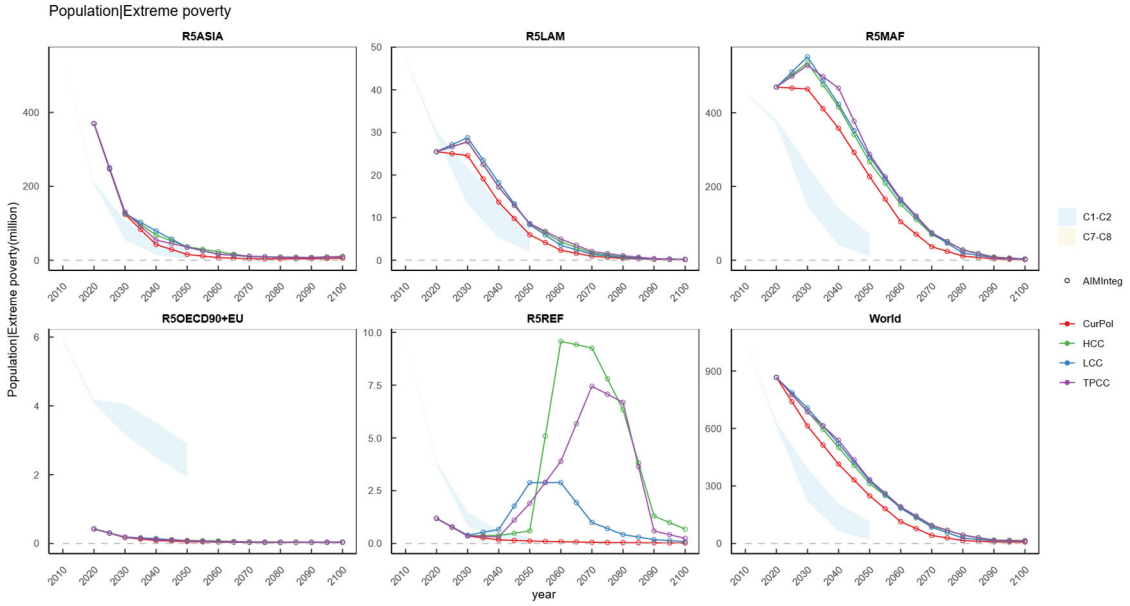


Supplementary Figure 10 Feasibility challenges assessment across all indicators for R5REF (reforming economy) region. Each panel represents the following indicators: Biomass/Wind/Solar/CCS (a–d); GDP loss (e); Carbon price (f); Energy investments (g); Wind/Solar/Wind/BECCS/Fossil CCS scale-up (h–l); Biofuels/Electricity in transport scale-up (m,n); Hydrogen/DAC scale-up (o,p); Decline in total/transport/industry/residential energy demand (q-t); Decline of livestock share in food demand (u); Forest cover increase (v); and Pasture cover decrease (w). Light blue and purple shaded ranges indicate medium and high levels of feasibility concern, respectively.

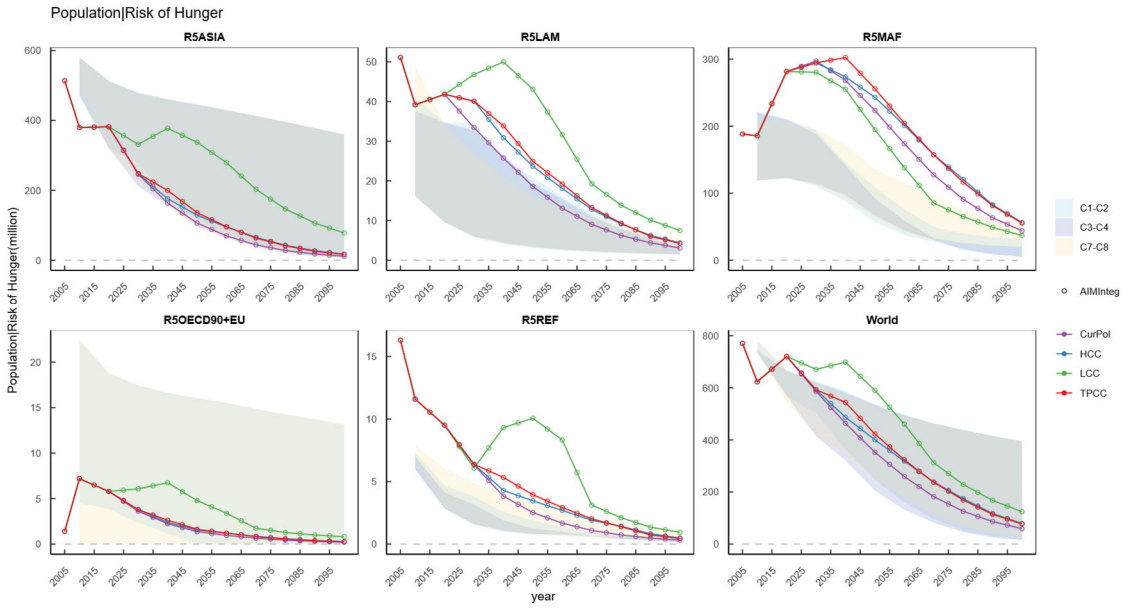


Supplementary Figure 11 Feasibility assessment using sensitivity analysis scenarios. The indicators and its criteria of feasibility challenge are same as the main assessment (See method)

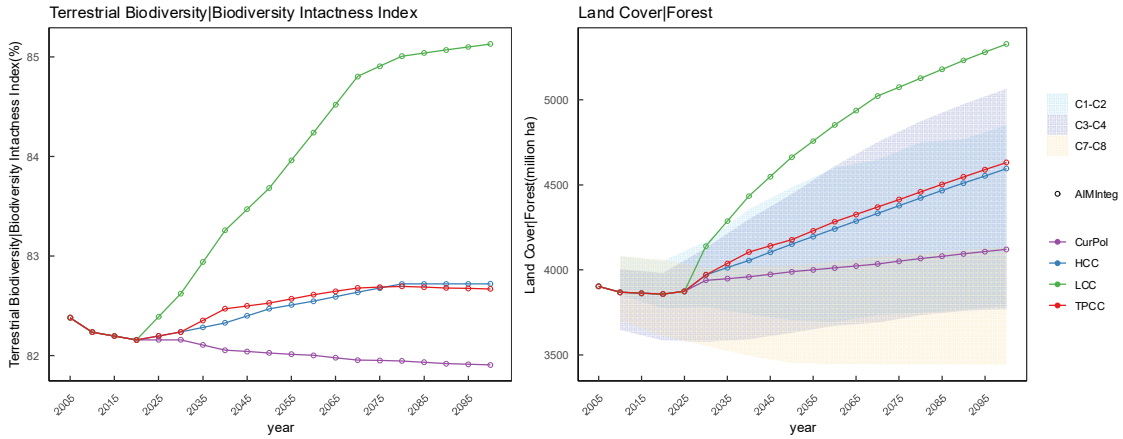
Each panel represents the following indicators: Biomass/Wind/Solar/CCS (a–d); GDP loss (e); Carbon price (f); Energy investments (g); Wind/Solar/Wind/BECCS/Fossil CCS scale-up (h–l); Biofuels/Electricity in transport scale-up (m,n); Hydrogen/DAC scale-up (o,p); Decline in total/transport/industry/residential energy demand (q-t); Decline of livestock share in food demand (u); Forest cover increase (v); and Pasture cover decrease (w). Light blue and purple shaded ranges indicate medium and high levels of feasibility concern, respectively.



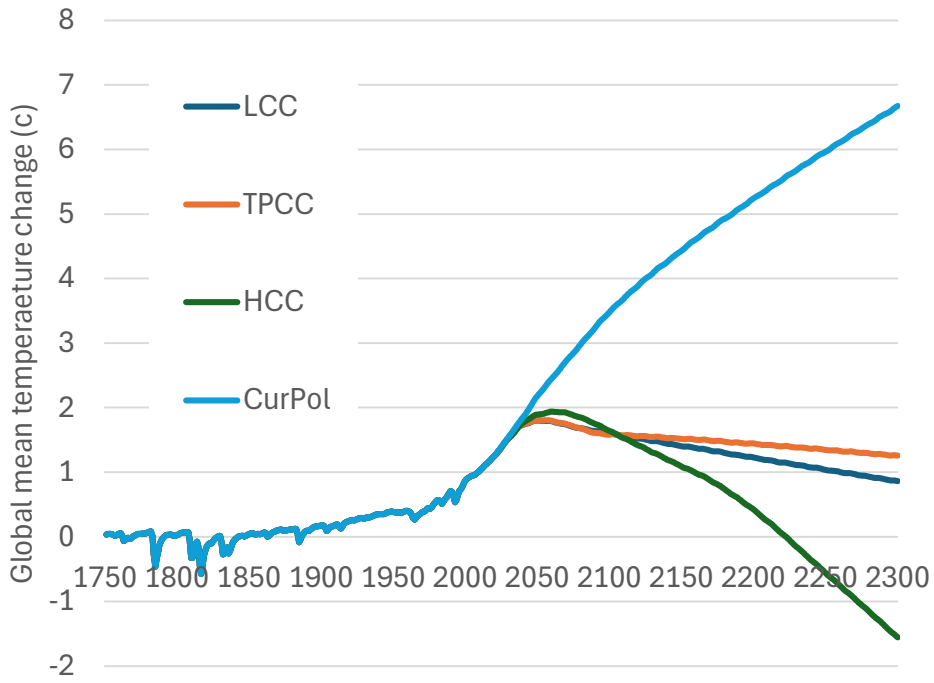
Supplementary Figure 12 Poverty headcount by aggregated regions



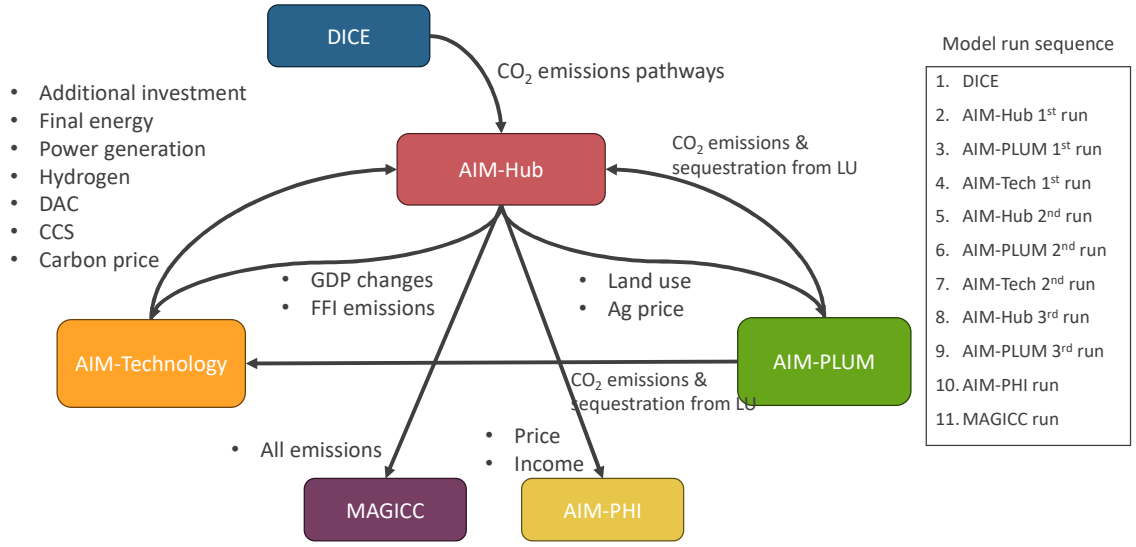
Supplementary Figure 13 Population at risk of hunger by aggregated regions



Supplementary Figure 14 Biodiversity index using BII and forest area.



Supplementary Figure 15 Global mean temperature changes from preindustrial level. The emissions after 2100 is assumed to be constant as in 2100.



Supplementary Figure 16 Modeling framework

Supplementary Tables

Supplementary Table 1 List of indicators that are used for feasibility assessment

	Indicators	Computation	Medium	High	Source
Geophysical	**Biomass potential**	Total primary energy generation from biomass in a given year	100 EJ yr^{-1}	245 EJ yr^{-1}	Frank et al. (2021)[5]; Creutzig et al. (2015)[6]
	Wind potential	Total secondary energy generation from wind in a given year	830 EJ yr^{-1}	2000 EJ yr^{-1}	Deng et al. (2015)[7]; Eurek et al. (2017)[8]
	Solar potential	Total primary energy generation from solar in a given year	1600 EJ yr^{-1}	50 000 EJ yr^{-1}	Rogner et al. (2012)[9]; Moomaw et al. (2011)[10]
	CCS geological potential	Cumulative CCS volume	730$GtCO_2$	1095$GtCO_2$	Gidden et al.(2025)[11]
Economic	**GDP loss**	Decadal percentage difference in GDP in mitigation vs baseline scenario	5%	10%	Analogy to current COVID-19 spending Andrijevic et al. (2020c)[12]
	Carbon price	Carbon price levels (NPV) and decadal increases	USD60	USD120 and 5×	Brutschin et al. (2021) [3]; OECD (2021)[13]
	Energy investments	Ratio between investments in mitigation vs baseline in a given decade	1.2	1.5	McCollum et al. (2018)[14]
Technological	**Wind/solar scale-up**	Decadal percentage point increase in the wind/ solar share in electricity generation	10 pp	20 pp	Brutschin et al. (2021) [3]; Wilson et al. (2020) [15]
	Nuclear scale-up	Decadal percentage point increase in the nuclear share in electricity generation	5 pp	10 pp	Brutschin et al. (2021) [3]; Markard et al. (2020)[16]; Wilson et al. (2020)[15]
	BECCS scale-up	Amount of CO_2 captured in a given year	3 $GtCO_2$ yr_{-1}	7 $GtCO_2$ yr_{-1}	Warszawski et al. (2021)[17]
	Fossil CCS scale-up	Amount of CO_2 captured in a given year	3.8 $GtCO_2$ yr_{-1}	8.8 $GtCO_2$ yr_{-1}	Budinis et al. (2018)[18]
	Biofuels in transport scale-up	Decadal percentage point increase in the share of biofuels in the final energy demand of the transport sector	5 pp	10 pp	Nogueira et al. (2020)[19]
	Electricity in transport scale-up	Decadal percentage point increase in the share of electricity in the final energy demand of the transport sector	10 pp	15 pp	Muratori et al. (2021)[20]
	Hydrogen scale-up	Decadal percentage point increase in the share of electricity input for hydrogen generation in the total electricity generation	10 pp	20 pp	Based on solar/wind scale-up
	DAC scale-up	Decadal percentage point increase in the share of electricity input for DAC in the total electricity generation	10 pp	20 pp	Based on solar/wind scale-up
Socio-cultural	**Total/transport/ industry/residential energy demand decline**	Decadal percentage decrease in demand	10 %	20 %	Grubler et al. (2018)[21]
	Decline of livestock share in food demand	Decadal percentage decrease in the livestock share in total food demand	0.5 pp	1 pp	Grubler et al. (2018) [21]; Bajželj et al. (2014)[22]
	Forest cover increase	Decadal percentage increase in forest cover	2 %	5 %	Brutschin et al. (2021) [3]
	Pasture cover decrease	Decadal percentage decrease in pasture cover	5 %	10 %	Brutschin et al. (2021) [3]

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Supplementary Table 2 Aggregated regional classifications and AIM-Hub native regions.

Native Region Code	**Native Region Name**	R5 classification	Developed/ developing
USA	USA	R5OECD90+EU	Developed
XE25	EU	R5OECD90+EU	Developed
XER	Rest of Europe	R5OECD90+EU	Developed
TUR	Turkey	R5OECD90+EU	Developed
XOC	New Zealand and Australia	R5OECD90+EU	Developed
CHN	China	R5ASIA	Developing
IND	India	R5ASIA	Developing
JPN	Japan	R5OECD90+EU	Developed
XSE	Rest of East and South East Asia	R5ASIA	Developing
XSA	Rest of Asia	R5ASIA	Developing
CAN	Canada	R5OECD90+EU	Developed
BRA	Brazil	R5LAM	Developing
XLM	Rest of Latin America	R5LAM	Developing
CIS	Former USSR	R5REF	Developing
XME	Middle East	R5MAF	Developing
XNF	North Africa	R5MAF	Developing
XAF	Other Africa	R5MAF	Developing

Supplementary Table 3 AIM-Hub native region definitions.

Native Region Name	AIM region code	ISO Code	Country
Rest of Latin America	XLM	ABW	Aruba
Rest of Asia	XSA	AFG	Afghanistan
Other Africa	XAF	AGO	Angola
Rest of Latin America	XLM	AIA	Anguilla
Rest of Europe	XER	ALB	Albania
Rest of Europe	XER	AND	Andorra
Rest of Latin America	XLM	ANT	Netherlands Antilles
Middle East	XME	ARE	United Arab Emirates
Rest of Latin America	XLM	ARG	Argentina
Former USSR	CIS	ARM	Armenia
Rest of Asia	XSA	ASM	American Samoa
Rest of Asia	XSA	ATF	French Southern Territories
Rest of Latin America	XLM	ATG	Antigua and Barbuda
New Zealand and Australia	XOC	AUS	Australia
EU	XE25	AUT	Austria
Former USSR	CIS	AZE	Azerbaijan
Other Africa	XAF	BDI	Burundi
EU	XE25	BEL	Belgium
Other Africa	XAF	BEN	Benin
Other Africa	XAF	BFA	Burkina Faso
Rest of Asia	XSA	BGD	Bangladesh
Rest of Europe	XER	BGR	Bulgaria
Middle East	XME	BHR	Bahrain
Rest of Latin America	XLM	BHS	Bahamas
Rest of Europe	XER	BIH	Bosnia and Herzegovina
Former USSR	CIS	BLR	Belarus
Rest of Latin America	XLM	BLZ	Belize
Rest of Latin America	XLM	BMU	Bermuda
Rest of Latin America	XLM	BOL	Bolivia, Plurinational State of
Brazil	BRA	BRA	Brazil
Rest of Latin America	XLM	BRB	Barbados

Rest of Asia	XSA	BRN	Brunei Darussalam
Rest of Asia	XSA	BTN	Bhutan
Rest of Latin America	XLM	BVT	Bouvet Island
Other Africa	XAF	BWA	Botswana
Other Africa	XAF	CAF	Central African Republic
Canada	CAN	CAN	Canada
Rest of Asia	XSA	CCK	Cocos (Keeling) Islands
Rest of Europe	XER	CHE	Switzerland
Rest of Latin America	XLM	CHL	Chile
China	CHN	CHN	China
Other Africa	XAF	CIV	Côte d'Ivoire
Other Africa	XAF	CMR	Cameroon
Other Africa	XAF	COD	Congo, the Democratic Republic of the
Other Africa	XAF	COG	Congo
Rest of Asia	XSA	COK	Cook Islands
Rest of Latin America	XLM	COL	Colombia
Other Africa	XAF	COM	Comoros
Other Africa	XAF	CPV	Cape Verde
Rest of Latin America	XLM	CRI	Costa Rica
Rest of Latin America	XLM	CUB	Cuba
Rest of Asia	XSA	CXR	Christmas Island
Rest of Latin America	XLM	CYM	Cayman Islands
EU	XE25	CYP	Cyprus
EU	XE25	CZE	Czech Republic
EU	XE25	DEU	Germany
Other Africa	XAF	DJI	Djibouti
Rest of Latin America	XLM	DMA	Dominica
EU	XE25	DNK	Denmark
Rest of Latin America	XLM	DOM	Dominican Republic
North Africa	XNF	DZA	Algeria
Rest of Latin America	XLM	ECU	Ecuador
North Africa	XNF	EGY	Egypt
Other Africa	XAF	ERI	Eritrea
Other Africa	XAF	ESH	Western Sahara

EU	XE25	ESP	Spain
EU	XE25	EST	Estonia
Other Africa	XAF	ETH	Ethiopia
EU	XE25	FIN	Finland
Rest of Asia	XSA	FJI	Fiji
Rest of Latin America	XLM	FLK	Falkland Islands (Malvinas)
EU	XE25	FRA	France
Rest of Europe	XER	FRO	Faroe Islands
Rest of Asia	XSA	FSM	Micronesia, Federated States of
Other Africa	XAF	GAB	Gabon
EU	XE25	GBR	United Kingdom
Former USSR	CIS	GEO	Georgia
Other Africa	XAF	GHA	Ghana
Rest of Europe	XER	GIB	Gibraltar
Other Africa	XAF	GIN	Guinea
Rest of Latin America	XLM	GLP	Guadeloupe
Other Africa	XAF	GMB	Gambia
Other Africa	XAF	GNB	Guinea-Bissau
Other Africa	XAF	GNQ	Equatorial Guinea
EU	XE25	GRC	Greece
Rest of Latin America	XLM	GRD	Grenada
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Rest of Latin America	XLM	GTM	Guatemala
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Rest of Asia	XSA	GUM	Guam
Rest of Latin America	XLM	GUY	Guyana
China	CHN	HKG	Hong Kong
Rest of Asia	XSA	HMD	Heard Island and McDonald Islands
Rest of Latin America	XLM	HND	Honduras
Rest of Europe	XER	HRV	Croatia
Rest of Latin America	XLM	HTI	Haiti
EU	XE25	HUN	Hungary
Rest of East and South East Asia	XSE	IDN	Indonesia
India	IND	IND	India

Rest of Asia	XSA	IOT	British Indian Ocean Territory
EU	XE25	IRL	Ireland
Middle East	XME	IRN	Iran, Islamic Republic of
Middle East	XME	IRQ	Iraq
Rest of Europe	XER	ISL	Iceland
Middle East	XME	ISR	Israel
EU	XE25	ITA	Italy
Rest of Latin America	XLM	JAM	Jamaica
Middle East	XME	JOR	Jordan
Japan	JPN	JPN	Japan
Former USSR	CIS	KAZ	Kazakhstan
Other Africa	XAF	KEN	Kenya
Former USSR	CIS	KGZ	Kyrgyzstan
Rest of East and South East Asia	XSE	KHM	Cambodia
Rest of Asia	XSA	KIR	Kiribati
Rest of Latin America	XLM	KNA	Saint Kitts and Nevis
Rest of East and South East Asia	XSE	KOR	Korea, Republic of
Middle East	XME	KWT	Kuwait
Rest of East and South East Asia	XSE	LAO	Lao People's Democratic Republic
Middle East	XME	LBN	Lebanon
Other Africa	XAF	LBR	Liberia
North Africa	XNF	LBY	Libyan Arab Jamahiriya
Rest of Latin America	XLM	LCA	Saint Lucia
Rest of Europe	XER	LIE	Liechtenstein
Rest of Asia	XSA	LKA	Sri Lanka
Other Africa	XAF	LSO	Lesotho
EU	XE25	LTU	Lithuania
EU	XE25	LUX	Luxembourg
EU	XE25	LVA	Latvia
North Africa	XNF	MAR	Morocco
Rest of Europe	XER	MCO	Monaco
Former USSR	CIS	MDA	Moldova, Republic of
Other Africa	XAF	MDG	Madagascar
Rest of Asia	XSA	MDV	Maldives

Rest of Latin America	XLM	MEX	Mexico
Rest of Asia	XSA	MHL	Marshall Islands
Rest of Europe	XER	MKD	Macedonia, the former Yugoslav Republic of
Other Africa	XAF	MLI	Mali
EU	XE25	MLT	Malta
Rest of East and South East Asia	XSE	MMR	Myanmar
Rest of Europe	XER	MNE	Montenegro
Rest of East and South East Asia	XSE	MNG	Mongolia
Rest of Asia	XSA	MNP	Northern Mariana Islands
Other Africa	XAF	MOZ	Mozambique
Other Africa	XAF	MRT	Mauritania
Rest of Latin America	XLM	MSR	Montserrat
Rest of Latin America	XLM	MTQ	Martinique
Other Africa	XAF	MUS	Mauritius
Other Africa	XAF	MWI	Malawi
Rest of East and South East Asia	XSE	MYS	Malaysia
Other Africa	XAF	MYT	Mayotte
Other Africa	XAF	NAM	Namibia
Rest of Asia	XSA	NCL	New Caledonia
Other Africa	XAF	NER	Niger
Rest of Asia	XSA	NFK	Norfolk Island
Other Africa	XAF	NGA	Nigeria
Rest of Latin America	XLM	NIC	Nicaragua
Rest of Asia	XSA	NIU	Niue
EU	XE25	NLD	Netherlands
Rest of Europe	XER	NOR	Norway
Rest of Asia	XSA	NPL	Nepal
Rest of Asia	XSA	NRU	Nauru
New Zealand and Australia	XOC	NZL	New Zealand
Middle East	XME	OMN	Oman
Rest of Asia	XSA	PAK	Pakistan
Rest of Latin America	XLM	PAN	Panama
Rest of Asia	XSA	PCN	Pitcairn

Rest of Latin America	XLM	PER	Peru
Rest of East and South East Asia	XSE	PHL	Philippines
Rest of Asia	XSA	PLW	Palau
Rest of Asia	XSA	PNG	Papua New Guinea
EU	XE25	POL	Poland
Rest of Latin America	XLM	PRI	Puerto Rico
Rest of East and South East Asia	XSE	PRK	Korea, Democratic People's Republic of
EU	XE25	PRT	Portugal
Rest of Latin America	XLM	PRY	Paraguay
Rest of Asia	XSA	PYF	French Polynesia
Middle East	XME	QAT	Qatar
Other Africa	XAF	REU	Réunion
Rest of Europe	XER	ROU	Romania
Former USSR	CIS	RUS	Russian Federation
Other Africa	XAF	RWA	Rwanda
Middle East	XME	SAU	Saudi Arabia
Other Africa	XAF	SDN	Sudan
Other Africa	XAF	SEN	Senegal
Rest of East and South East Asia	XSE	SGP	Singapore
Rest of Latin America	XLM	SGS	South Georgia and the South Sandwich Islands
Other Africa	XAF	SHN	Saint Helena, Ascension and Tristan da Cunha
Rest of Europe	XER	SJM	Svalbard and Jan Mayen
Rest of Asia	XSA	SLB	Solomon Islands
Other Africa	XAF	SLE	Sierra Leone
Rest of Latin America	XLM	SLV	El Salvador
Rest of Europe	XER	SMR	San Marino
Other Africa	XAF	SOM	Somalia
Rest of Latin America	XLM	SPM	Saint Pierre and Miquelon
Rest of Europe	XER	SRB	Serbia
Other Africa	XAF	STP	Sao Tome and Principe
Rest of Latin America	XLM	SUR	Suriname
EU	XE25	SVK	Slovakia

EU	XE25	SVN	Slovenia
EU	XE25	SWE	Sweden
Other Africa	XAF	SWZ	Swaziland
Other Africa	XAF	SYC	Seychelles
Middle East	XME	SYR	Syrian Arab Republic
Rest of Latin America	XLM	TCA	Turks and Caicos Islands
Other Africa	XAF	TCD	Chad
Other Africa	XAF	TGO	Togo
Rest of East and South East Asia	XSE	THA	Thailand
Former USSR	CIS	TJK	Tajikistan
Rest of Asia	XSA	TKL	Tokelau
Former USSR	CIS	TKM	Turkmenistan
Rest of East and South East Asia	XSE	TLS	Timor-Leste
Rest of Asia	XSA	TON	Tonga
Rest of Latin America	XLM	TTO	Trinidad and Tobago
North Africa	XNF	TUN	Tunisia
Turkey	TUR	TUR	Turkey
Rest of Asia	XSA	TUV	Tuvalu
Rest of East and South East Asia	XSE	TWN	Taiwan
Other Africa	XAF	TZA	Tanzania, United Republic of
Other Africa	XAF	UGA	Uganda
Former USSR	CIS	UKR	Ukraine
Rest of Asia	XSA	UMI	United States Minor Outlying Islands
Rest of Latin America	XLM	URY	Uruguay
USA	USA	USA	United States
Former USSR	CIS	UZB	Uzbekistan
Rest of Europe	XER	VAT	Holy See (Vatican City State)
Rest of Latin America	XLM	VCT	Saint Vincent and the Grenadines
Rest of Latin America	XLM	VEN	Venezuela, Bolivarian Republic of
Rest of Latin America	XLM	VGB	Virgin Islands, British
Rest of Latin America	XLM	VIR	Virgin Islands, U.S.
Rest of East and South East Asia	XSE	VNM	Viet Nam
Rest of Asia	XSA	VUT	Vanuatu
Rest of Asia	XSA	WLF	Wallis and Futuna

Rest of Asia	XSA	WSM	Samoa
Middle East	XME	YEM	Yemen
Other Africa	XAF	ZAF	South Africa
Other Africa	XAF	ZMB	Zambia
Other Africa	XAF	ZWE	Zimbabwe