Earnings drivers & outlook

We estimate 43% earnings CAGR b/w FY23-26E for Schneider Electric Infra, driven by c.30% CAGR rise in order booking (led by RDSS driven distribution spend increase), c.23% CAGR increase in inter-group sales (from commissioning of Kolkata factory), 315bps gross margin expansion and consequentially, c.525bps increase in EBITDA margin expansion.

Exhibit 85: Key earning drivers

(Rs mn)	FY21	FY22	FY23	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	Comments
All India DISCOM capex	523,440	544,400	680,500	755,637	807,516	1,111,274	1,263,153	750,000	787,500	826,875	Medium term boost by RDSS driven ordering
Distribution equipment mkt	433,223	611,782	563,585	625,813	668,779	920,350	1,046,135	621,145	652,202	684,812	
Schneider's mkt share(%)	1.1	1.1	1.4	1.7	1.9	2.2	2.3	2.5	2.6	2.8	
Order inflow -											
Utility business	4,825	6,969	7,688	10,571	12,968	20,148	24,470	15,461	17,212	19,100	
Share of utility business in total order inflow	50.0	50.0	50.0	55.0	57.5	60.0	65.0	55.0	50.0	49.0	Increase b/w FY24-28E on account of RDSS
Total Order Inflow	**9,649**	**13,938**	**15,376**	**19,220**	**22,554**	**33,579**	**37,647**	**28,111**	**34,425**	**38,980**	
Average order book	8,214	8,525	10,139	11,216	12,678	17,148	22,652	21,839	20,040	22,451	
Execution rate (%)	**130.4**	**138.7**	**142.7**	**150.0**	**150.0**	**145.0**	**140.0**	**145.0**	**150.0**	**150.0**	Short cycle business
Revenue -											
External	10,453	11,740	13,974	18,413	20,756	26,771	33,800	33,953	32,567	36,424	
- of which, Services	789	1,008	1,303	1,433	1,576	1,734	1,907	2,098	2,308	2,539	
Inter-group	2,518	3,564	3,798	4,178	5,578	6,978	8,378	8,880	9,769	10,745	Inter-group sale to rise with commissioining of Kolkata factory in FY25E
Gross margin (%)	**30.9**	**29.3**	**32.0**	**35.0**	**35.0**	**35.2**	**35.3**	**35.5**	**35.7**	**35.9**	
Payment to parent / group entities as % of revenue	3.5	3.1	3.0	3.0	3.0	3.3	3.6	3.7	3.7	3.7	
Other costs as % of revenue	22.2	20.4	19.4	19.0	18.3	17.0	15.9	15.8	16.1	16.2	
EBITDA margin (%)	**5.2**	**5.8**	**9.7**	**13.0**	**13.7**	**14.9**	**15.8**	**16.0**	**15.9**	**15.9**	Benefit of operating leverage
Gross Fixed Asset Turnover (x)	**3.2**	**3.6**	**4.0**	**3.9**	**3.6**	**3.8**	**4.1**	**4.1**	**3.9**	**3.8**	**Operating leverage, rising share of services**

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 86: Income Statement

Standalone financials

(Rs mn)	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Core operating revenue	13,715	13,731	12,862	15,123	17,642	22,435	26,171	33,577
Other revenue	188	113	110	180	130	156	163	172
Total revenue	**13,903**	**13,844**	**12,971**	**15,303**	**17,772**	**22,591**	**26,334**	**33,748**
- direct costs	10,010	9,830	8,963	10,814	12,085	14,684	17,117	21,886
Gross profit	**3,893**	**4,014**	**4,008**	**4,489**	**5,686**	**7,907**	**9,217**	**11,863**
Gross margin (%)	*28.0*	*29.0*	*30.9*	*29.3*	*32.0*	*35.0*	*35.0*	*35.2*
- employee cost	1,997	2,095	1,847	2,104	2,359	2,713	3,133	3,979
- other expense	1,532	1,585	1,492	1,493	1,612	2,257	2,483	2,855
EBITDA	**363**	**333**	**669**	**892**	**1,715**	**2,937**	**3,601**	**5,028**
EBITDA margin (%)	*2.6*	*2.4*	*5.2*	*5.8*	*9.7*	*13.0*	*13.7*	*14.9*
- depreciation	258	218	221	173	185	225	360	463
- finance cost	443	481	482	485	530	489	470	470
+ other income	435	120	185	99	122	69	80	79
Core PBT	**97**	**(246)**	**151**	**334**	**1,122**	**2,293**	**2,851**	**4,174**
- Forex	61	64	31	32	38	-	-	-
- MTM	-	-	-	-	-	-	-	-
+ exceptional item	(280)	14	(130)	(26)	153	(34)	-	-
Reported PBT	**(244)**	**(296)**	**(10)**	**276**	**1,236**	**2,259**	**2,851**	**4,174**
- Tax	-	-	-	-	-	45	684	1,002
Tax rate (%)	-	-	-	-	-	*2.0*	*24.0*	*24.0*
Reported PAT	**(244)**	**(296)**	**(10)**	**276**	**1,236**	**2,214**	**2,167**	**3,172**
+ Adjustments	280	(14)	97	26	(153)	34	-	-
Recurring PAT	**36**	**(309)**	**87**	**302**	**1,083**	**2,248**	**2,167**	**3,172**

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 87: GSe vs. Consensus - Schneider Electric Infra standalone financials

(Rs mn)	GSe			Consensus			Divergence (%)		
Standalone	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E
Revenue	22,591	26,334	33,748	22,360	26,752	31,262	1.0	(1.6)	8.0
EBITDA	2,937	3,601	5,028	2,862	3,424	4,095	2.6	5.2	22.8
PAT	2,248	2,167	3,172	2,219	2,682	3,339	1.3	(19.2)	(5.0)

*as on 11th Apr'24.

Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 88: Balance Sheet
Standalone financials

(Rs mn)	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
GFA	3,806	3,980	4,008	4,226	4,455	5,855	7,355	8,855
Accumulated depreciation	722	839	1,010	1,141	1,255	1,480	1,839	2,303
NFA	**3,085**	**3,141**	**2,998**	**3,085**	**3,199**	**4,375**	**5,515**	**6,552**
CWIP	64	42	84	60	143	143	143	143
Total Fixed Assets	**3,148**	**3,182**	**3,082**	**3,146**	**3,343**	**4,518**	**5,659**	**6,695**
Goodwill	-	-	-	-	-	-	-	-
Investment - LT	-	-	-	-	-	-	-	-
Investment - ST	-	-	-	-	-	-	-	-
Regulatory deferral balance	-	-	-	-	-	-	-	-
Other non-current assets	590	653	745	740	816	816	816	816
Inventory	2,421	2,185	2,202	2,258	2,974	3,626	4,407	5,879
Receivables	4,175	4,338	4,643	4,545	5,459	6,630	7,873	10,552
Cash & bank	184	133	229	361	196	201	254	197
Loans & advances	101	114	80	124	103	103	103	103
Other current assets	857	589	510	524	660	660	660	660
Total current assets	**7,739**	**7,359**	**7,665**	**7,812**	**9,391**	**11,219**	**13,296**	**17,391**
Payables	4,720	4,457	4,277	4,592	5,403	6,559	7,826	10,260
Provisions	1,053	977	926	891	987	987	987	987
Other current liabilities	161	89	123	95	125	125	125	125
Net current assets	**1,805**	**1,835**	**2,339**	**2,235**	**2,876**	**3,548**	**4,358**	**6,018**
Total Assets	**5,543**	**5,671**	**6,165**	**6,120**	**7,034**	**8,882**	**10,832**	**13,529**
Share capital	478	478	478	478	478	478	478	478
Reserves & surplus	(244)	(464)	(443)	(117)	1,033	3,280	5,231	7,927
Net worth	**234**	**14**	**35**	**361**	**1,511**	**3,758**	**5,709**	**8,405**
Minority interest								
LT debt	1,918	4,453	4,475	4,675	4,801	4,401	4,401	4,401
ST debt	3,362	1,155	1,609	1,048	700	700	700	700
Total debt	**5,281**	**5,608**	**6,084**	**5,723**	**5,501**	**5,101**	**5,101**	**5,101**
Other non-current liabilities	28	48	45	37	23	23	23	23
Deferred tax liabilities	-	-	-	-	-	-	-	-
Total Liabilities	**5,543**	**5,671**	**6,165**	**6,120**	**7,034**	**8,882**	**10,832**	**13,529**

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 89: Cash Flow Statement
Standalone financials

(Rs mn)	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Adjusted PAT	**36**	**(309)**	**87**	**302**	**1,083**	**2,248**	**2,167**	**3,172**
Add:								
Depreciation & Ammortisation	258	218	221	173	185	225	360	463
Minority interest & profit from associates								
Finance cost	443	481	482	485	530	489	470	470
Deferred tax	-	-	-	-	-	-	-	-
Less:								
Other income	435	120	185	99	122	69	80	79
Regulatory income / (expense)	-	-	-	-	-	-	-	-
Net extra-ordinary income	280	(14)	130	26	(153)	34	-	-
Operating cash flow before WC change	**22**	**283**	**474**	**835**	**1,830**	**2,857**	**2,917**	**4,027**
Change in Inventories	295	237	(18)	(55)	(716)	(652)	(781)	(1,472)
Change in Receivables	(45)	(163)	(306)	99	(915)	(1,171)	(1,243)	(2,679)
Change in Other current assets	84	255	114	(59)	(115)	-	-	-
Change in Current Liab.	(1,882)	(411)	(198)	251	939	1,156	1,267	2,434
Working Capital Inflow / (Outflow)	**(1,547)**	**(82)**	**(407)**	**236**	**(807)**	**(667)**	**(757)**	**(1,716)**
Cash flow from Operating Activities	**(1,525)**	**201**	**67**	**1,070**	**1,023**	**2,190**	**2,160**	**2,310**
Purchase of Fixed Assets	238	(152)	(70)	(195)	(312)	(1,400)	(1,500)	(1,500)
Purchase of Investments	-	-	-	-	-	-	-	-
Cash flow from capital commitments	**238**	**(152)**	**(70)**	**(195)**	**(312)**	**(1,400)**	**(1,500)**	**(1,500)**
FCF after Capital Commitments	**(1,287)**	**49**	**(3)**	**876**	**712**	**790**	**660**	**810**
(Purchase) / sale of ST Investments	-	-	-	-	-	-	-	-
Other Income	435	120	185	99	122	69	80	79
Cash flow from Investing Activities								
Issue of share capital during the year	-	-	-	-	-	-	-	-
Net proceeds from fresh borrowings	807	208	533	(374)	(235)	(400)	0	0
Dividend paid including tax	-	-	-	-	-	-	(217)	(476)
Finance cost	(443)	(481)	(482)	(485)	(530)	(489)	(470)	(470)
Reserve adjustments	(118)	65	(267)	(11)	(81)	-	-	-
Cash flow from Financing Activities	**247**	**(208)**	**(216)**	**(869)**	**(846)**	**(889)**	**(687)**	**(946)**
Net extra-ordinary income	280	(14)	130	26	(153)	34	-	-
Total Increase / (Decrease) in Cash	**(325)**	**(51)**	**96**	**132**	**(166)**	**5**	**53**	**(57)**

Source: Company data, Goldman Sachs Global Investment Research

Valuation & TP

We derive our 12-month forward target price of Rs470/sh by forecasting 25 year free cash flows, in line with Hitachi Energy India, in our transmission coverage, discounted to FY26E at an 11.4% cost of equity and ascribing 5% terminal growth. Our FCF incorporates -

1. 10% revenue CAGR b/w FY23-50E, led by materialisation of our distribution TAM estimate and rise in energy efficiency linked capex spend.
2. Gross margin expansion of 650bps+ from 32% in FY23 to c.39% by FY50E, on the back of product mix improvement and rise in exports and service revenue.
3. EBITDA margin expansion of 1,400bps, on account of higher gross margins and operating leverage benefit, although against a weak base.
4. Corresponding capex rise to keep fixed asset turns in-line with 3x-4.5x range
5. We assign an M&A rank of 3 to Schneider Electric Infra (denoting low likelihood of M&A) given it is majority owned by global parent Schneider Electric (SCHN.PA) - 75% as of Dec'23).

Exhibit 90: Schneider Electric Infra - DCF snapshot

(Rs mn)	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	FY32E	FY35E	FY40E	FY45E	FY50E	
All India distribution capex	807,516	1,111,274	1,263,153	750,000	787,500	826,875	874,973	925,861	1,052,295	1,302,323	1,535,435	1,809,917	
- Distribution capex growth YoY (%)		37.6	13.7	(40.6)	5.0	5.0	5.8	5.8	4.4	4.4	3.3	3.3	
India distribution equipment market	668,779	920,350	1,046,135	621,145	652,202	684,812	724,647	766,792	871,504	1,078,575	1,271,637	1,498,961	
- Distribution equipment market growth YoY (%)		37.6	13.7	(40.6)	5.0	5.0	5.8	5.8	4.4	4.4	3.3	3.3	
Schneider India's mkt share (%)	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.9	4.9	5.1	5.4	
- Market share gain YoY (bps)		15	20	20	20	20	20	20	20	20	5	5	
Share of utility business in overall order inflows	57.5	60.0	65.0	55.0	50.0	49.0	47.5	46.0	44.5	42.0	40.8	39.5	
Order inflow	22,554	32,045	36,842	28,111	35,077	40,378	47,127	54,828	76,166	125,554	160,371	204,508	
- Order inflow growth YoY (bps)		42.1	15.0	(23.7)	24.8	15.1	16.7	16.3	11.3	10.1	5.0	5.0	
Opening order book	11,697	14,559	20,898	25,360	20,339	22,950	26,351	30,694	53,287	80,857	102,604	128,577	
Order inflow	22,554	32,045	36,842	28,111	35,077	40,378	47,127	54,828	76,166	125,554	160,371	204,508	
Closing order book	14,559	20,898	25,360	20,339	22,950	26,351	30,694	35,715	53,530	86,290	107,395	134,056	
Average order book	**13,128**	**17,728**	**23,129**	**22,849**	**21,644**	**24,651**	**28,523**	**33,205**	**53,409**	**83,574**	**104,999**	**131,316**	
Execution rate (%)	150.0	145.0	140.0	145.0	150.0	150.0	150.0	150.0	151.5	154.0	156.5	159.0	
- YoY change in execution rate (bps)		(500)	(500)	500	500	-	-	-	50	50	50	50	
Share of service & exports in total revenue	15.6	14.5	13.9	15.0	16.7	16.5	15.7	14.9					
- YoY change (bps)		(108)	(61)	115	170	(21)	(83)	(79)					
Gross margin (%)	35.0	35.2	35.3	35.5	35.7	35.9	36.0	36.2	36.6	37.4	38.1	38.9	
Payment made to parent & group entities as % of revenue	3.0	3.3	3.6	3.7	3.7	3.7	3.7	3.7	3.8	4.0	4.0	4.0	
Other operating costs as % of revenue	18.3	17.0	15.9	15.8	16.1	16.2	15.9	15.7	15.2	14.5	13.7	13.0	
EBITDA	**3,838**	**5,324**	**6,914**	**7,353**	**7,610**	**8,702**	**10,349**	**12,394**	**17,118**	**27,417**	**36,862**	**49,313**	
EBITDA margin (%)	19.5	20.7	21.4	22.2	23.4	23.5	24.2	24.9	21.2	21.3	22.4	23.6	
Depreciation	360	463	549	628	640	691	781	871	1,248	2,418	3,958	5,499	
Finance cost	470	470	571	604	465	433	539	677	694	1,090	1,469	1,664	
Tax	722	1,054	1,390	1,469	1,561	1,819	2,167	2,603	3,595	5,758	7,742	10,357	
PAT (ex-post tax other income)	**2,286**	**3,337**	**4,403**	**4,652**	**4,944**	**5,759**	**6,862**	**8,243**	**11,581**	**18,151**	**23,692**	**31,794**	
Depreciation	360	463	549	628	640	691	781	871	1,248	2,418	3,958	5,499	
Capex	(1,500)	(1,500)	(1,500)	(200)	(200)	(1,500)	(1,500)	(1,500)	(2,000)	(5,000)	(5,000)	(5,000)	
Working capital	(757)	(1,716)	(3,275)	(734)	(114)	(1,110)	(1,326)	(1,487)	(1,498)	(1,416)	(1,125)	(888)	
Debt repayment	-	-	2,200	(1,500)	(1,500)	800	1,500	1,500	86	1,250	641	329	
FCFE	**389**	**584**	**2,377**	**2,846**	**3,770**	**4,640**	**6,317**	**7,626**	**9,417**	**15,402**	**22,167**	**31,733**	**524,306**
Period	-	-	1	2	3	4	5	6	9	14	19	24	
Discount factor	-	1.0	0.9	0.8	0.7	0.7	0.6	0.5	0.4	0.2	0.1	0.1	0.1
DCF	-	584	2,135	2,295	2,730	3,018	3,690	4,000	3,577	3,417	2,872	2,401	39,678
CRoCI (%)	*25.1*	*27.2*	*27.2*	*26.6*	*25.8*	*25.4*	*26.2*	*27.2*	*31.6*	*37.0*	*36.7*	*39.4*	

PV of FCF	**112,761**	**CoE (%)**	**11.4**
+ FY26 cash	**197**	**Terminal growth (%)**	**5.0**
Value/sh	**470**		

Source: Company data, Goldman Sachs Global Investment Research

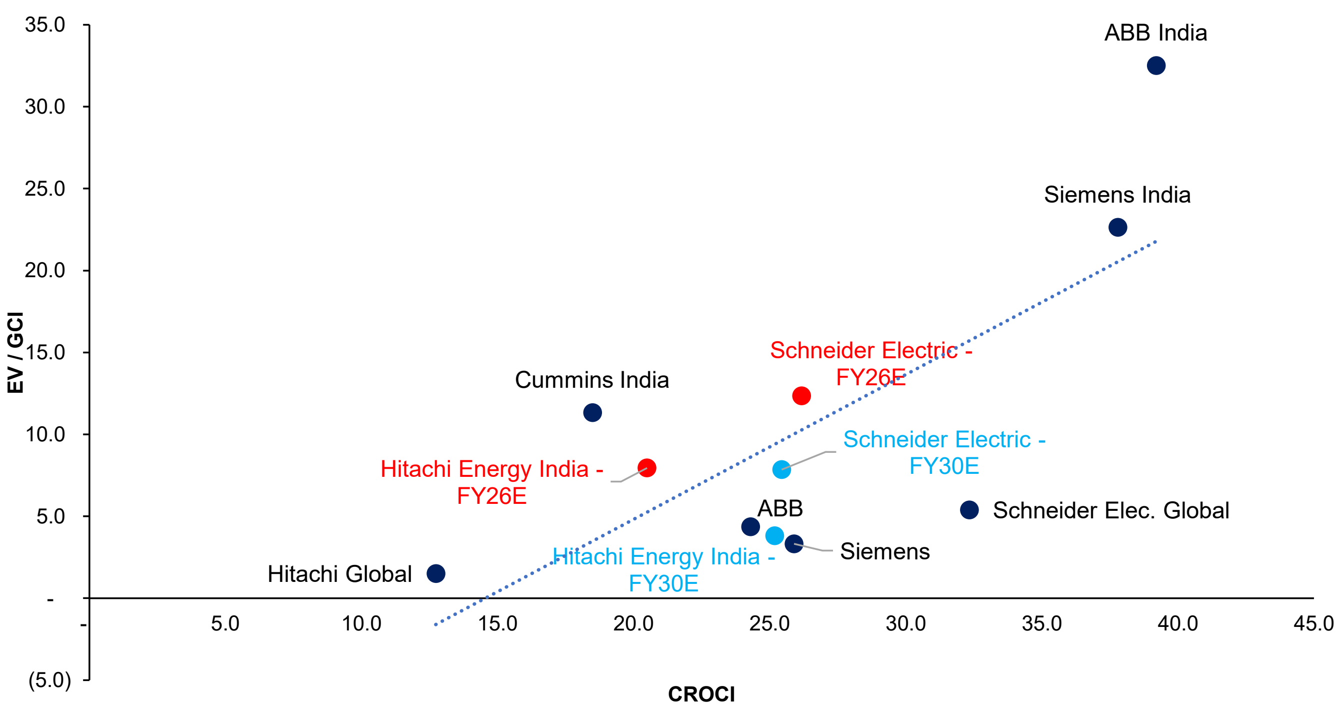
We conduct a Bull case scenario analysis which assumes larger distribution capex, higher market share gains for Schneider, larger gross and EBITDA margins expansion due to superior product mix, lower competitive intensity and higher operating leverage. Our bull case implied per share fair valuation suggests FY26E P/E of 40x - derived from ascribing our base case implied P/E multiple of 35x to FY30E EPS and discounting it back to FY26E using GSe CoE of 13.5% (higher than our base case of 11.4% to factor the higher risk from a longer forecast horizon). In our bear case scenario, we assume lower distribution capex and higher competitive intensity, which would result in lower market share gain for Schneider and inferior gross and EBITDA margins vs. our base case.

Exhibit 91: Our Bull-case for Schneider Electric Infra factors sharper order inflow growth, larger market share gain and higher operating leverage, whereas our Bear-case factors lower distribution capex ramp up and materially lower margin improvement

Particulars	Base	Bull	Bear
Distribution asset base (CAGR %; FY23-30E)	10.8	12.0	7.7
Order inflow (CAGR %; FY23-30E)	14.2	19.0	5.2
Market share change (bps; FY23-30E)	143	210	105
Gross margin change (bps; FY23-30E)	385	570	150
Operating leverage change (bps; FY23-30E)	244	365	(440)
FY26E EPS	13	17	2
FY30E EPS	21	32	2
Implied P/E (x)	35	40	33
Fair value (Rs/sh)	**470**	**695**	**50**

Source: Goldman Sachs Global Investment Research

Exhibit 92: Relative positioning - Indian MNC industrial companies trade at significant premium to their global parents; we estimate Schneider Electric Infra's CROCI to improve marginally b/w FY26-30E



Source: Company data, Visible Alpha Consensus Data, Datastream, Goldman Sachs Global Investment Research

Investment thesis

We believe Schneider Electric Infra has an addressable TAM of USD27bn b/w FY24-32E, benefiting from the pick up in power distribution capex from full implementation of the Revamped Distribution System Scheme (RDSS) over the next 5 years. Incrementally, the company will also be a potential beneficiary of carbon tax imposition led efficiency improvement initiatives in the future. The company is also working towards leveraging its parent's global technology platform to improve service offerings and benefit from the global supply chain diversification theme.

However, despite these positives, current valuation of c.56x FY26E P/E appears expensive, for a largely commoditised business, offering little by way of value addition. Our reverse DCF indicates CMP is factoring c.8% terminal growth beyond 18% core earnings CAGR b/w FY23-40E.

Valuation methodology and risks

Valuation methodology: We derive our 12-month forward target price of Rs470/sh (implied FY26E P/E of 35x) by forecasting 25 year free cash flows and discounting it to FY26E by 11.4% cost of equity and ascribing 5% terminal growth. Our FCF incorporates c.10% revenue CAGR and 685bps / 1,400bps gross / EBITDA margins expansion respectively, between FY23-50E.

Key upside risks and what could make us change our view:

1. Sharper than expected ramp up in distribution capex, as state governments begin receiving capital subsidy from the central government under the RDSS.
2. Privatisation of power distribution / rise in parallel distribution licensing could lead to accelerated distribution capex spend, thereby resulting in quicker than expected materialisation of our TAM estimate.
3. In our opinion, capex on energy efficiency will be sensitive to quantum of carbon tax in future, with higher carbon taxes incentivising industries to invest more, thereby increasing the TAM for Schneider and expediting its materialisation.
4. The low probability event of Schneider Electric Infra combining with the low voltage unlisted businesses of Schneider India, could not only open new businesses for the listed company (power backup, smart metering, rooftop solar, home automation etc.), but also increase its importance in the global portfolio, significantly.

Investment theses, price targets, risks and methodologies

Power Grid Corporation of India (PGCIL)

PGCIL is the largest beneficiary of our US$500bn+ grid capex estimate as India undergoes its energy transition. Its large balance sheet and low cost of debt position it well to capture the bulk of this opportunity, while its technical capabilities and execution experience will help the company secure large, complex projects on nomination. PGCIL has a material cost of debt advantage over its private competitors, and we believe its strong annual free cash generation from the legacy cost plus asset base is adequate to fund c.30% of India's grid capex requirement in FY24-32E, without over-leveraging or reducing its current dividend payout.

Additionally, we believe PGCIL's long-term beta of c.0.6x is not truly reflective of its risk profile, as its global peers have a median beta c.55% lower, resulting in a materially higher cost of equity - which impacts PGCIL's valuations. With comfort around earnings stability post the recent tariff regulations (which grandfathered in legacy asset returns) and a much larger returns-accretive asset base, we expect PGCIL's beta to be commensurate with its risk profile over time.

Valuation methodology: Our 12-month target price of Rs355 values the regulated transmission business on P/B, factoring in regulated equity growth, core RoE and 10.8% CoE (GSe of 13.5% adjusted for long-term beta of 0.6x). For valuing the competitively won projects, we model 35 year NPVs based on levelised bid and estimated capital cost and the consultancy & telecom businesses at 12-15x FY26E P/E.

Key downside risks: 1) delay/slower-than-expected pick-up in transmission project awards; 2) higher competitive intensity in new project auctions; and 3) sharp rise in bond yields.

Hitachi Energy India

We view Hitachi Energy India as a pure upstream manufacturing play on India's energy transition, with its technology leadership in the high-voltage equipment segment and highly indigenized manufacturing capabilities. We expect Hitachi to be a significant beneficiary of our US$100bn/US$500bn grid capex estimate by FY32E/50E, in addition to the US$14bn/US$51bn non-grid related transmission equipment spend over the same period.

Additionally, Hitachi Energy India is also expected to be a beneficiary of rising grid digitalization (opportunity to differentiate and increase share of recurring, high-margin service revenue), a global transmission equipment shortage (could improve export pricing power and factory utilization) and the supply chain diversification theme (potentially enhances India's positioning as a global feeder factory).

Valuation methodology: We derive our 12-month forward target price of Rs8,250 (implied FY26E P/E of 60x) by forecasting free cash flows out to FY40E and discounting to FY26E by 11.4% cost of equity and ascribing 5% terminal growth. Our FCF incorporates c.14% revenue CAGR and 750bps / 1500bps gross / EBITDA margins expansion respectively, between FY23-40E.

Key downside risks: Delay in transmission capex cycle pick up, rise in competitive intensity dragging margins, increase in royalty / technology usage payments to global parent.

Schneider Electric Infrastructure Ltd.

Schneider Electric is an India-based Power Distribution company manufacturing, designing, building and servicing advanced products/systems for electricity distribution, such as distribution transformers, medium voltage switchgear, protection relays and electricity distribution and automation equipment. We expect Schneider to have a TAM of US$27bn in FY24-32E, benefiting from the pick-up in power distribution capex from full implementation of the Revamped Distribution System Scheme (RDSS) over the next five years. Incrementally, the company will also be a potential beneficiary of efficiency improvements led by carbon tax imposition. The company is also working toward leveraging its parent's global technology platform to improve service offerings and position the India business to benefit from global supply chain diversification.

However, despite these positives, current valuation of c.57x FY26E P/E appears rich considering we expect company's RoCE to remain sub-30%. Further, unlike Hitachi Energy India, Schneider Electric Infra's products do not entail high-end technology and hence we expect the company to have sufficient pricing power to warrant the current high multiples. Our reverse DCF indicates CMP is factoring in c.8% terminal growth beyond an 18% core earnings CAGR in FY23-40E.

Valuation methodology: We derive our 12-month forward target price of Rs470 (implied FY26E P/E of 35x) by forecasting free cash flows out to FY40E and discounting to FY26E with an 11.4% cost of equity and 5% terminal growth. Our FCF incorporates a c.10% revenue CAGR and 685bps/1400bps gross/EBITDA margin expansion, respectively, in FY23-50E.

Key upside risks and what could make us change our view:

1. Sharper-than-expected ramp-up in distribution capex as state governments begin receiving capital subsidy from the central government under the RDSS.
2. Privatisation of power distribution/rise in parallel distribution licensing could lead to accelerated distribution capex spend, thereby resulting in quicker-than-expected materialisation of our TAM estimate.
3. In our opinion, capex on energy efficiency will be sensitive to the quantum of the carbon tax in future, with higher carbon taxes incentivising industries to invest more, thereby increasing the TAM for Schneider and expediting its materialisation.
4. The low probability event of Schneider Electric Infra, combined with the low voltage unlisted businesses of Schneider India, could not only open new businesses for the listed company (power backup, smart metering, rooftop solar, home automation etc.), but also significantly increase its importance in the global portfolio.

Disclosure Appendix

Reg AC

We, Apoorva Bahadur and Nikhil Bhandari, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

GS Factor Profile

The Goldman Sachs Factor Profile provides investment context for a stock by comparing key attributes to the market (i.e. our coverage universe) and its sector peers. The four key attributes depicted are: Growth, Financial Returns, Multiple (e.g. valuation) and Integrated (a composite of Growth, Financial Returns and Multiple). Growth, Financial Returns and Multiple are calculated by using normalized ranks for specific metrics for each stock. The normalized ranks for the metrics are then averaged and converted into percentiles for the relevant attribute. The precise calculation of each metric may vary depending on the fiscal year, industry and region, but the standard approach is as follows:

Growth is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

For a more detailed description of how we calculate the GS Factor Profile, please contact your GS representative.

M&A Rank

Across our global coverage, we examine stocks using an M&A framework, considering both qualitative factors and quantitative factors (which may vary across sectors and regions) to incorporate the potential that certain companies could be acquired. We then assign a M&A rank as a means of scoring companies under our rated coverage from 1 to 3, with 1 representing high (30%-50%) probability of the company becoming an acquisition target, 2 representing medium (15%-30%) probability and 3 representing low (0%-15%) probability. For companies ranked 1 or 2, in line with our standard departmental guidelines we incorporate an M&A component into our target price. M&A rank of 3 is considered immaterial and therefore does not factor into our price target, and may or may not be discussed in research.

Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

Disclosures

The rating(s) for Hitachi Energy India Ltd., Power Grid and Schneider Electric Infrastructure Ltd. is/are relative to the other companies in its/their coverage universe: Hitachi Energy India Ltd., NTPC Ltd., Power Grid, SJVN Ltd., Schneider Electric Infrastructure Ltd., Tata Power

Company-specific regulatory disclosures

The following disclosures relate to relationships between The Goldman Sachs Group, Inc. (with its affiliates, "Goldman Sachs") and companies covered by Goldman Sachs Global Investment Research and referred to in this research.

Goldman Sachs expects to receive or intends to seek compensation for investment banking services in the next 3 months: Schneider Electric Infrastructure Ltd. (Rs794.15)

Goldman Sachs had an investment banking services client relationship during the past 12 months with: Schneider Electric Infrastructure Ltd. (Rs794.15)

There are no company-specific disclosures for: Hitachi Energy India Ltd. (Rs7,564.45) and Power Grid (Rs274.35)

Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global Equity coverage universe

	Rating Distribution			Investment Banking Relationships		
	Buy	Hold	Sell	Buy	Hold	Sell
Global	48%	36%	16%	64%	56%	41%

As of April 1, 2024, Goldman Sachs Global Investment Research had investment ratings on 2,885 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by the FINRA Rules. See 'Ratings, Coverage universe and related definitions' below. The Investment Banking Relationships chart reflects the percentage of subject companies within each rating category for whom Goldman Sachs has provided investment banking services within the previous twelve months.

Regulatory disclosures

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs trades or may trade as a principal in debt securities (or in related derivatives) of issuers discussed in this report.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy generally prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director or advisor of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman Sachs & Co. LLC and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

Distribution of ratings: See the distribution of ratings disclosure above. **Price chart:** See the price chart, with changes of ratings and price targets in prior periods, above, or, if electronic format or if with respect to multiple companies which are the subject of this report, on the Goldman Sachs website at https://www.gs.com/research/hedge.html.

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. **Australia:** Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. In producing research reports, members of Global Investment Research of Goldman Sachs Australia may attend site visits and other meetings hosted by the companies and other entities which are the subject of its research reports. In some instances the costs of such site visits or meetings may be met in part or in whole by the issuers concerned if Goldman Sachs Australia considers it is appropriate and reasonable in the specific circumstances relating to the site visit or meeting. To the extent that the contents of this document contains any financial product advice, it is general advice only and has been prepared by Goldman Sachs without taking into account a client's objectives, financial situation or needs. A client should, before acting on any such advice, consider the appropriateness of the advice having regard to the client's own objectives, financial situation and needs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests and a copy of Goldman Sachs' Australian Sell-Side Research Independence Policy Statement are available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. **Brazil:** Disclosure information in relation to CVM Resolution n. 20 is available at https://www.gs.com/worldwide/brazil/area/gir/index.html. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 20 of CVM Resolution n. 20, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. **Canada:** This information is being provided to you for information purposes only and is not, and under no circumstances should be construed as, an advertisement, offering or solicitation by Goldman Sachs & Co. LLC for purchasers of securities in Canada to trade in any Canadian security. Goldman Sachs & Co. LLC is not registered as a dealer in any jurisdiction in Canada under applicable Canadian securities laws and generally is not permitted to trade in Canadian securities and may be prohibited from selling certain securities and products in certain jurisdictions in Canada. If you wish to trade in any Canadian securities or other products in Canada please contact Goldman Sachs Canada Inc., an affiliate of The Goldman Sachs Group Inc., or another registered Canadian dealer. **Hong Kong:** Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. **India:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited, Research Analyst - SEBI Registration Number INH000001493, 951-A, Rational House, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India, Corporate Identity Number U74140MH2006FTC160634, Phone +91 22 6616 9000, Fax +91 22 6616 9001. Goldman Sachs may beneficially own 1% or more of the securities (as such term is defined in clause 2 (h) the Indian Securities Contracts (Regulation) Act, 1956) of the subject company or companies referred to in this research report. Investment in securities market are subject to market risks. Read all the related documents carefully before investing. Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. Goldman Sachs (India) Securities Private Limited Investor Grievance E-mail: india-client-support@gs.com. Compliance Officer: Anil Rajput |Tel: + 91 22 6616 9000 | Email: anil.m.rajput@gs.com. **Japan:** See below. **Korea:** This research, and any access to it, is intended only for "professional investors" within the meaning of the Financial Services and Capital Markets Act, unless otherwise agreed by Goldman Sachs. Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. **New Zealand:** Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests is available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. **Russia:** Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. Research reports do not constitute a personalized investment recommendation as defined in Russian laws and regulations, are not addressed to a specific client, and are prepared without analyzing the financial circumstances, investment profiles or risk profiles of clients. Goldman Sachs assumes no responsibility for any investment decisions that may be taken by a client or any other person based on this research report. **Singapore:** Goldman Sachs (Singapore) Pte. (Company Number: 198602165W), which is regulated by the Monetary Authority of Singapore, accepts legal responsibility for this research, and should be contacted with respect to any matters arising from, or in connection with, this research. **Taiwan:** This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. **United Kingdom:** Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Conduct Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union and United Kingdom: Disclosure information in relation to Article 6 (2) of the European Commission Delegated Regulation (EU) (2016/958) supplementing Regulation (EU) No 596/2014 of the European Parliament and of the Council (including as that Delegated Regulation is implemented into United Kingdom domestic law and regulation following the United Kingdom's departure from the European Union and the European Economic Area) with regard to regulatory technical standards for the technical arrangements for objective presentation of investment recommendations or other information recommending or suggesting an investment strategy and for disclosure of particular interests or indications of conflicts of interest is available at https://www.gs.com/disclosures/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer registered with the Kanto Financial Bureau under registration number Kinsho 69, and a member of Japan Securities Dealers Association, Financial Futures Association of Japan Type II Financial Instruments Firms Association, The Investment Trusts Association, Japan, and Japan Investment Advisers Association. Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Ratings, coverage universe and related definitions

Buy (B), Neutral (N), Sell (S) Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's total return potential relative to its coverage universe. Any stock not assigned as a Buy or a Sell on an Investment List with an active rating (i.e., a stock that is not Rating Suspended, Not Rated, Coverage Suspended or Not Covered), is deemed Neutral. Each region manages Regional Conviction lists, which are selected from Buy rated stocks on the respective region's Investment lists and represent investment recommendations focused on the size of the total return potential and/or the likelihood of the realization of the return across their respective areas of coverage. The addition or removal of stocks from such Conviction lists are managed by the Investment Review Committee or other designated committee in each respective region and do not represent a change in the analysts' investment rating for such stocks.

Total return potential represents the upside or downside differential between the current share price and the price target, including all paid or anticipated dividends, expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The total return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

Coverage Universe: A list of all stocks in each coverage universe is available by primary analyst, stock and coverage universe at https://www.gs.com/research/hedge.html.

Not Rated (NR). The investment rating, target price and earnings estimates (where relevant) are not provided or have been suspended pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or in a strategic transaction involving this company, when there are legal, regulatory or policy constraints due to Goldman Sachs' involvement in a transaction, when the company is an early-stage biotechnology company, and in certain other circumstances. **Rating Suspended (RS).** Goldman Sachs Research has suspended the investment rating and price target for this stock, because there is not a sufficient fundamental basis for determining an investment rating or target price. The previous investment rating and target price, if any, are no longer in effect for this stock and should not be relied upon. **Coverage Suspended (CS).** Goldman Sachs has suspended coverage of this company. **Not Covered (NC).** Goldman Sachs does not cover this company. **Not Available or Not Applicable (NA).** The information is not available for display or is not applicable. **Not Meaningful (NM).** The information is not meaningful and is therefore excluded.

Global product; distributing entities

Goldman Sachs Global Investment Research produces and distributes research products for clients of Goldman Sachs on a global basis. Analysts based in Goldman Sachs offices around the world produce research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A.; Public Communication Channel Goldman Sachs Brazil: 0800 727 5764 and / or contatogoldmanbrasil@gs.com. Available Weekdays (except holidays), from 9am to 6pm. Canal de Comunicação com o Público Goldman Sachs Brasil: 0800 727 5764 e/ou contatogoldmanbrasil@gs.com. Horário de funcionamento: segunda-feira à sexta-feira (exceto feriados), das 9h às 18h; in Canada by Goldman Sachs & Co. LLC; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman Sachs & Co. LLC. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom.

Goldman Sachs International ("GSI"), authorised by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA, has approved this research in connection with its distribution in the United Kingdom.

European Economic Area: GSI, authorised by the PRA and regulated by the FCA and the PRA, disseminates research in the following jurisdictions within the European Economic Area: the Grand Duchy of Luxembourg, Italy, the Kingdom of Belgium, the Kingdom of Denmark, the Kingdom of Norway, the Republic of Finland and the Republic of Ireland; GSI - Succursale de Paris (Paris branch) which is authorised by the French Autorité de contrôle prudentiel et de resolution ("ACPR") and regulated by the Autorité de contrôle prudentiel et de resolution and the Autorité des marches financiers ("AMF") disseminates research in France; GSI - Sucursal en España (Madrid branch) authorized in Spain by the Comisión Nacional del Mercado de Valores disseminates research in the Kingdom of Spain; GSI - Sweden Bankfilial (Stockholm branch) is authorized by the SFSA as a "third country branch" in accordance with Chapter 4, Section 4 of the Swedish Securities and Market Act (Sw. lag (2007:528) om värdepappersmarknaden) disseminates research in the Kingdom of Sweden; Goldman Sachs Bank Europe SE ("GSBE") is a credit institution incorporated in Germany and, within the Single Supervisory Mechanism, subject to direct prudential supervision by the European Central Bank and in other respects supervised by German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and Deutsche Bundesbank and disseminates research in the Federal Republic of Germany and those jurisdictions within the European Economic Area where GSI is not authorised to disseminate research and additionally, GSBE, Copenhagen Branch filial af GSBE, Tyskland, supervised by the Danish Financial Authority disseminates research in the Kingdom of Denmark; GSBE - Sucursal en España (Madrid branch) subject (to a limited extent) to local supervision by the Bank of Spain disseminates research in the Kingdom of Spain; GSBE - Succursale Italia (Milan branch) to the relevant applicable extent, subject to local supervision by the Bank of Italy (Banca d'Italia) and the Italian Companies and Exchange Commission (Commissione Nazionale per le Società e la Borsa "Consob") disseminates research in Italy; GSBE - Succursale de Paris (Paris branch), supervised by the AMF and by the ACPR disseminates research in France; and GSBE - Sweden Bankfilial (Stockholm branch), to a limited extent, subject to local supervision by the Swedish Financial Supervisory Authority (Finansinpektionen) disseminates research in the Kingdom of Sweden.

General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are as of the date hereof and are subject to change without prior notification. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by Global Investment Research. Goldman Sachs & Co. LLC, the United States broker dealer, is a member of SIPC (https://www.sipc.org).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and principal trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, principal trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

The analysts named in this report may have from time to time discussed with our clients, including Goldman Sachs salespersons and traders, or may discuss in this report, trading strategies that reference catalysts or events that may have a near-term impact on the market price of the equity securities discussed in this report, which impact may be directionally counter to the analyst's published price target expectations for such stocks. Any such trading strategies are distinct from and do not affect the analyst's fundamental equity rating for such stocks, which rating reflects a stock's return potential relative to its coverage universe as described herein.

We and our affiliates, officers, directors, and employees will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research, unless otherwise prohibited by regulation or Goldman Sachs policy.

The views attributed to third party presenters at Goldman Sachs arranged conferences, including individuals from other parts of Goldman Sachs, do not necessarily reflect those of Global Investment Research and are not an official view of Goldman Sachs.

Any third party referenced herein, including any salespeople, traders and other professionals or members of their household, may have positions in the products mentioned that are inconsistent with the views expressed by analysts named in this report.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options and futures disclosure documents which are available from Goldman Sachs sales representatives or at https://www.theocc.com/about/publications/character-risks.jsp and https://www.fiadocumentation.org/fia/regulatory-disclosures_1/fia-uniform-futures-and-options-on-futures-risk-disclosures-booklet-pdf-version-2018. Transaction costs may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

Differing Levels of Service provided by Global Investment Research: The level and types of services provided to you by Goldman Sachs Global Investment Research may vary as compared to that provided to internal and other external clients of GS, depending on various factors including your individual preferences as to the frequency and manner of receiving communication, your risk profile and investment focus and perspective (e.g., marketwide, sector specific, long term, short term), the size and scope of your overall client relationship with GS, and legal and regulatory constraints. As an example, certain clients may request to receive notifications when research on specific securities is published, and certain clients may request that specific data underlying analysts' fundamental analysis available on our internal client websites be delivered to them electronically through data feeds or otherwise. No change to an analyst's fundamental research views (e.g., ratings, price targets, or material changes to earnings estimates for equity securities), will be communicated to any client prior to inclusion of such information in a research report broadly disseminated through electronic publication to our internal client websites or through other means, as necessary, to all clients who are entitled to receive such reports.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For research, models or other data related to one or more securities, markets or asset classes (including related services) that may be available to you, please contact your GS representative or go to https://research.gs.com.

Disclosure information is also available at https://www.gs.com/research/hedge.html or from Research Compliance, 200 West Street, New York, NY 10282.