CIN No. : L29190MH1996PLC099583
Web : www.perfectinfra.com I **Email :** info@perfectinfra.com
Regd.Office : Plot No. R - 637, T. T. C Industrial Area,
Thane Belapur Road, MIDC Rabale, Navi Mumbai - 400 701.

PERFECT
INFRAENGINEERS LTD.

Date: 04 July, 2024

To,
The Manager,
National Stock Exchange of India Limited
Exchange Plaza, C-1, Block G, Bandra Kurla Complex,
Bandra (East), Mumbai-400051

Symbol: PERFECT

Subject: Investor Presentation pursuant to Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015

Dear Sir,

Pursuant to Regulation 30 of the SEBI (LODR) Regulations, 2015, we are enclosing herewith the Investor Presentation of the Company.

The above information will be made available at the Company's website www.perfectinfra.com

This is for your kind information and records.

Thanking you

For Perfect Infraengineers Limited.

NIMESH NATWARLAL MEHTA

Mr. Nimesh Mehta

Managing Director



PERFECT
INFRAENGINEERS LTD.

HTS PANEL

HYBRID THERMAL SOLAR PANEL

HTS Panel

Product Presentation



HTS Panel: The Why

Air-Conditioners



ACCOUNT FOR ~60% OF ANY COMMERCIAL BUILDING'S ELECTRICITY COST!!

"A blind spot in climate discussions are Air-Conditioners"

Source: RENEWABLE ENERGY WORLD

"Air-Conditioners' contribution in peak load could reach 45% of all electricity consumed in India by 2040"

Source: ISHRAE



HTS Panel: Technology Licence

PERFECT INFRAENGINEERS LTD.

- **25+ years** experience in HVAC and MEP business
- **NSE Listed**
- HTS Panel manufacturing in **Navi-Mumbai**

SUNTRAC

- Took **10 years** to invent the HTS Panel
- **International patent holder**
- RnD & manufacturing at **Tempe, AZ, USA**



Nimesh & Manisha Mehta (Perfect) and Richard Cooley (Suntrac)



Team Perfect & SunTrac at NSE, BKC



*In Nov '18, PERFECT partnered with SUNTRAC and received the **exclusive rights to manufacture & license** this patented proprietary technology **in entire India***



HTS Panel: The What

1 HTS Panel Connects with AC Outdoor

HTS Panel integrates with any brands' VRF or Chiller (New/existing AC)



Invertor AC outdoor unit

2 AC Refrigerant Flows through HTS Panel

HTS panel performs controlled heating/pressurization of refrigerant gas



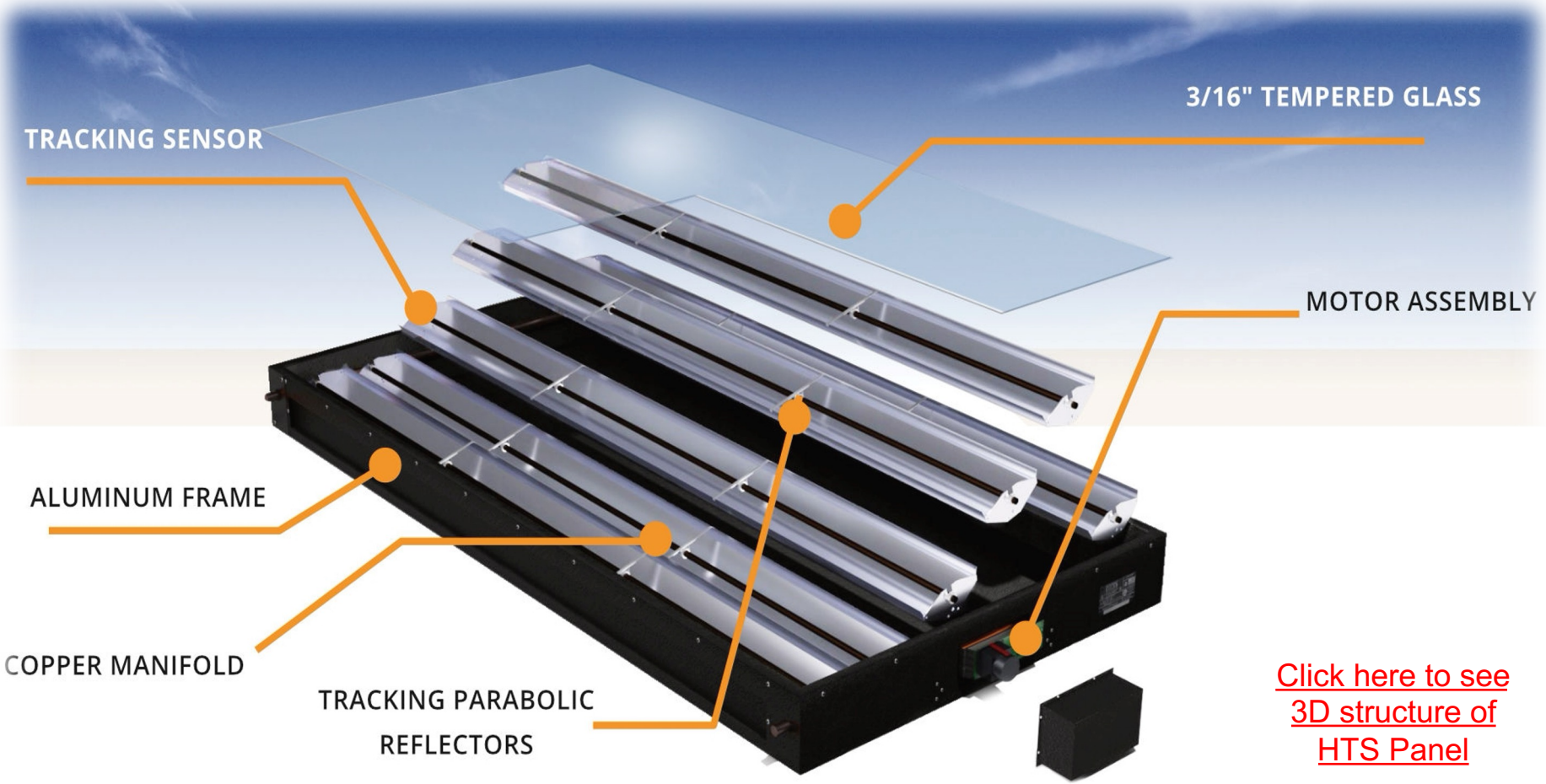
Perfect's HTS Panel

3 AC Compressor Load Reduces

Solar energy replaces AC compressor workdone

Resulting in:

ELECTRICITY SAVINGS UPTO 40%



Click here to see 3D structure of HTS Panel

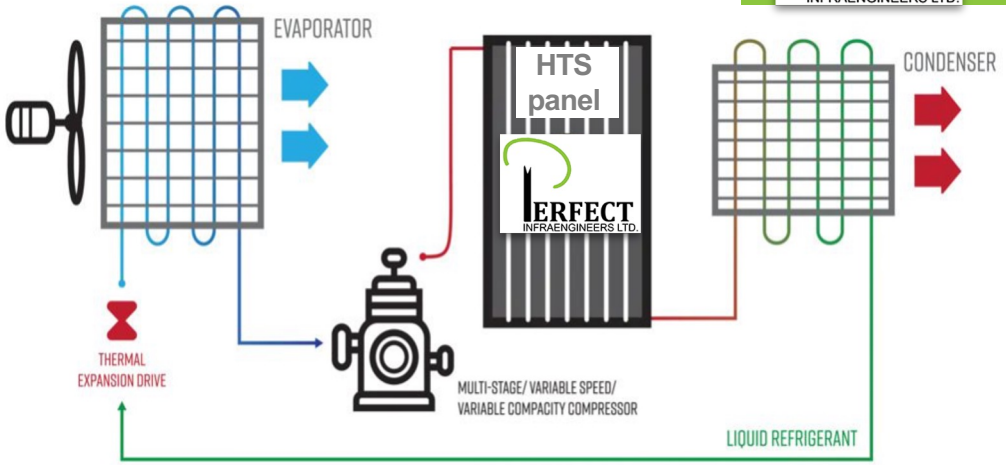


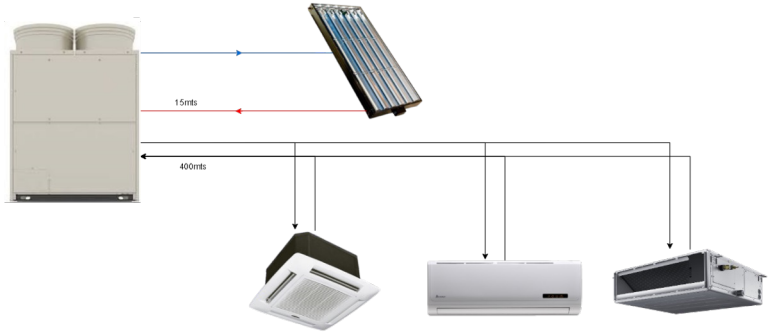
HTS Panel: The How

Working of HTS Panel

- The hot refrigerant gas from the compressor is connected to the top inlet of the HTS Panel. Heat and pressure are added to the refrigerant, generated by the sun and the heated/pressurized refrigerant is returned from the panel outlet to the HVAC units' condenser
- Cooling in the room remaining the same, the compressor and the HTS panel now do the same amount of work that earlier just the compressor was doing

Click here for short video on HTS Panel Working





Details of a Single HTS Panel

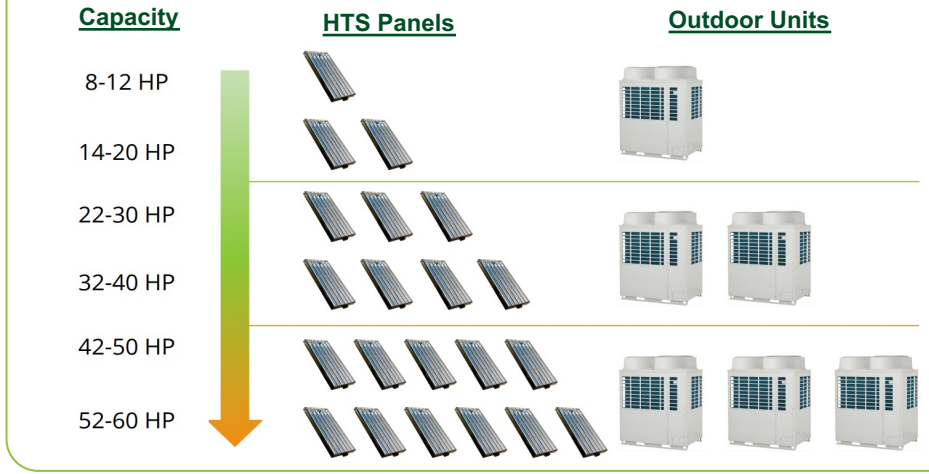
Size	Weight	Combines with
*4 * 8 Feet*	*95 Kgs*	*7.5 ton (10 HP) AC*



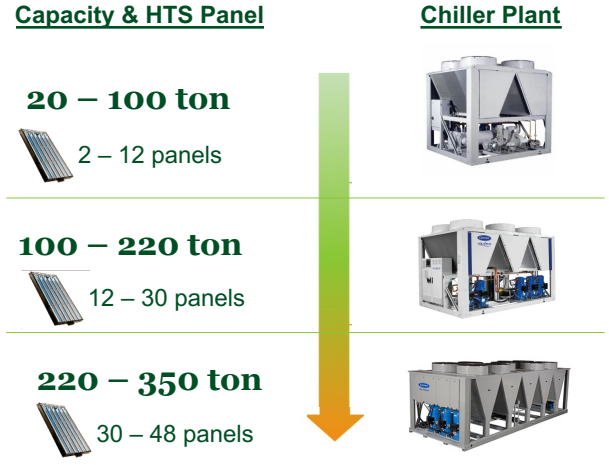
HTS Panel: Use Cases

HTS Panel Requirements	Cooling capacity created by single (8*4 ft) panel
✓ *Daytime AC Usage* ✓ *AC Outdoor on/close to terrace* ✓ *AC Type: Invertor based*	**7.5 ton | 10 HP | 90,000 BTU | 24,000 kcal/h | 28 kW**

VRF Integration



Chiller Integration



Private & Confidential | Perfect Infraengineers Ltd.



Comparison with Conventional Solar (PV) Panel

Solar (Photovoltaic) Panel

Generates electricity



8ft x 4ft PV Panel generates ~300 watt of electricity

V/S

Hybrid Thermal Solar Panel

Reduces electricity consumption of AC



8ft x 4ft HTS Panel saves energy equivalent to ~3,500 watts

HTS Panels are ~90% more Space Saving than Solar Panels

Private & Confidential | Perfect Infraengineers Ltd.



HTS Panel: Benefits

Make your VRF or Chiller (new/existing) of any brand into the most efficient AC on the planet

Benefits for User

Monetary Savings
Upto 40% reduction in AC electricity bills

Best in industry COP of 6+
Improved efficiency due workdone by renewable source

Judicious use of roof top space
~1200% more space efficient than Solar (PV) Panel

Improved life of AC
AC compressor works on partial load due to HTS Panel

Attractive ROI of ~3 years
Life of HTS panel is 15+ yrs; with 5 yr warranty

Benefits for India

Impact on DISCOMS
Power cuts in peak summer load can be put to check

Greenhouse gas emissions
ACs make ~150 MMT of CO_2 emissions in India

National SDG Goals
SDG targets in sustainable cities & climate action

Private & Confidential | Perfect Infraengineers Ltd.



HTS Panel: Adoption in India

30+ Proof of Concept Sites

Certified product testing reports made by 3rd party, private & government bodies gives an average saving of ~35%

All reports made public on company website

CERTIFICATIONS

GRIHA | GreenPro | SRCC – Solar Rating & Certification Corporation

INSTALLATIONS

400+ Panel	*Catering to ~4000 tons of AC across ~100 Pvt & Govt sites*

CLIENTELE

20+ MNCs	*Including, L & T, P & G, Adani Group, Honda, ICICI Bank, Mahindra, AIS*
5 PWDs	*Maharashtra, Gujarat, Rajasthan, Himachal Pradesh, Chhattisgarh*
10+ PSUs	*Including, NTPC, REC, Indian Oil, AIIMS, CIDCO*



Private Clientele

PERFECT INFRAENGINEERS LTD.

ICICI Bank

standard chartered

LARSEN & TOUBRO

SPARK MINDA

adani

SIEMENS

Mahindra

McDonald's

HONDA

AIS

P&G

DANA

GRAZIANO
High-Performance Transmissions

NIVEA

SFC Solutions

Panchshil

CBRE

BIKANERVALA

ELECON
GEARING THE FUTURE

Hero



Goverment Clientele

PUBLIC WORKS DEPARTMENTS

MAHARASHTRA

RAJASTHAN

GUJARAT

CHHATTISGARH

MADHYA PRADESH

HIMACHAL PRADESH

PSUs

OTHER GOVERNMENT INSTITUTIONS

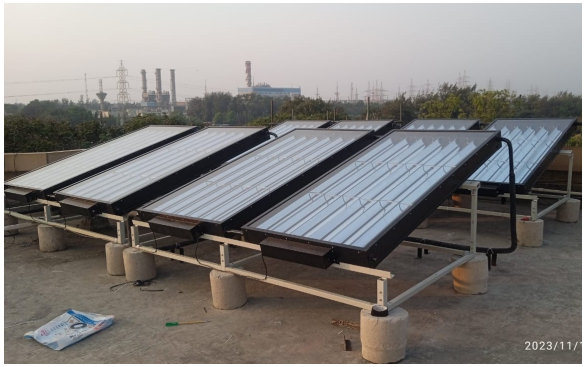
HIGH COURTS

AIIMS

MC GURUGRAM



Installation Gallery













Summary of Testing Reports (1/2)

PRIVATE ORGANIZATIONS

Sr.	Site Name	Tested on Brand	Savings	Report
1	**L&T,** Surat	Mitsubishi H - 64HP	**47.24%**	Click Here
2	**Adani** HQ, Shantigram, Gujarat	LG - 20HP	**49.47%**	Click Here
3	**ICICI Bank,** Delhi	Carrier - 30HP	**42.04%**	Click Here
4	**AIS Glass,** Bawal	Hitachi - 10HP	**36.20%**	Click Here
5	**Honda** Plant, Vithalapur, Gujarat	Daikin - 10HP	**44.57%**	Click Here
6	**Standard Chartered Bank + CBRE,** Mumbai	Voltas-10HP + 12HP	**55.18%**	Click Here
7	**Siemens** Plant, Kalwa, Navi-Mumbai	LG - 10HP	**35.63%**	Click Here
8	**Mahindra** MHEL, Chakan, Pune	LG - 20HP	**48.60%**	Click Here
9	**P&G** Plant, Mandideep, MP	LG - 14HP	**48.00%**	Click Here
10	**Hero MotoCorp**, Halol, Gujarat	Toshiba - 12HP	**35.40%**	Click Here
11	**Nivea** Plant, Sanand, Gujarat	Carrier - 14HP	**30.50%**	Click Here
12	**Dana Graziano** Plant, Gujarat	Samsung- 14+12HP	**40.40%**	Click Here
13	**Elecon Engineering** Plant, Gujarat	Daikin - 12HP	**33.88%**	Click Here



Summary of Testing Reports (2/2)

14	**SFC Solutions,** Sanand, Gujarat	Reynold - 10TR	**49.80%**	Click Here
15	**Intertek** Andheri	LG - 2TR Inverter	**58.00%**	Click Here
16	**McDonald's** Outlet, Kalamboli	BlueStar - 8.5TR	**26.42%**	Click Here
17	**NIBE Limited**, Chakan, Pune	LG - 1.5 TR	**37.21%**	Click Here
18	**SKS Hospital,** Salem	Samsung - 24HP	**45.61%**	Click Here

GOVERNMENT ORGANIZATIONS

19	**Mantralaya**, Mumbai	Daikin - 12HP	**29.31%**	Click Here
20	**Secretariat Building,** Jaipur	LG - 20+14HP	**29.43%**	Click Here
21	**Military Engineering Services,** Asvini Hospital, Mumbai	Mitsubishi - 14HP + 16HP	**40.36%**	Click Here
22	**Indian Oil,** Mathura Terminal	Hitachi - 2 TR	**32.30%**	Click Here
23	**RGPV Institute**, Bhopal Testing laboratory of Urja Vikas Nigam Limited, MP	Voltas - 1.5 TR	**37.68%**	Click Here
24	**BMC Consultant**, Mumbai	Toshiba - 8HP	**54.29%**	Click Here
25	**Vishwakarma University**, Haryana	Voltas - 18HP+14HP	**30.80%**	Click Here

HTS Panel

Market Size



OVERVIEW

	Highwall (Split AC)	VRF/VRV	Chillers
Size/Capacity of AC	1 to 2 ton each	8 to 30 ton each	10 to 250 ton each
Usage	Mainly Residential	Commercial	Commercial
Feasibility with HTS Panel	Not Recommended *As ROI in months is high*	Yes	Yes

Since each VRF is smaller in size – the customers are more willing to try out a new technology in such a machine. Chillers usually are massive in size and hence a new customer does not prefer to try out a new technology on them. With over 400 installations on VRFs, Perfect is now starting to expand its focus on the Chiller market in India *(Commercial ACs in India are ~60% VRFs & ~40% Chillers)*

Source: Internal company calculations



HTS PANEL MARKET SIZE *(Existing VRFs)*

VRFs Installed (currently) = ~50,00,000 HP

HTS Panels for the VRFs	~5,00,000 Panels
Market Size (~Rs 4,00,000 per HTS Panel)	INR 20,000 Crore
Addressable Market (5%)	INR 1,000 Crore

An Addressable Market of INR **1,000 Crores** in existing VRF Systems in India

Source: Internal company calculations



HTS PANEL MARKET SIZE *(New VRF installations)*

VRFs Installed (each year) = ~8,00,000 HP

HTS Panels for the VRFs	~80,000 Panels
Market Size (Rs 4,00,000 per HTS Panel)	INR 3,200 Cr
Addressable Market (5%)	INR 160 Cr

A YEARLY ADDITION to Addressable Market of **INR 150+ Cr**

Source: Internal company calculations; Blueweave Consulting

HTS Panel

Challenges & Solutions



HVAC INDUSTRY IN INDIA: The hard truth

A Highly Competitive Market

- With 12+ players in the VRF market, the industry is highly competitive
- In some cases, the sales team of AC OEMs are instructed to take orders at lower than cost price – ie. at a loss
- **The AC OEMs (manufacturer) resort to heavy discounting during sales to the client**

The Only Way to Make Profits

- All AC OEMs in India make money only on service business /spare parts
- Once the AC sale is done – the user is dependent on the OEM for spare parts
- **With a monopoly on spare parts – every OEM makes huge margins in aftersales**

The Outcome: Lack of innovation

- The OEMs don't innovate to bring cutting edge technologies to the market since every company is competing on just pricing with product differentiation being minimal. **The OEM has an incentive to make cheap products – since it reduces the sale price and also increases the frequency of spare parts purchase from the user**
- Additionally, with a **explosion in AC demand from the T2+ market** in the recent years, sales growth targets of AC OEMs are met by the same old product line up
- With high entry barrier into the sector, AC OEMs are not worried of other players/technologies entering the market



HTS PANEL – The Path Ahead

Tackling the OEM problem: Moves by Perfect

- Perfect **takes full onus of the combined Hybrid VRF** system (AC + HTS Panel)
- Perfect **offers AMC** to the client at the **same or reduced price** as the AC OEM service division
- Perfect offers **HDFC Ergo insurance** for the combined Hybrid VRF system (AC + HTS Panel) to the end client

Chiller Market Entry

- With 3 chiller orders in advanced stages of approval, in Delhi, Surat, and Pune locations respectively, Perfect is penetrating into a new market segment beyond commercial VRFs
- The Chiller market will open the gates for much larger ticket size per order

Revenue Projection for FY25

- With 6+ testing certificate/approvals received from prestigious government bodies (including, Delhi Metro, Mahanagar Gas Lim, Nagpur High Court, Mumbai Metropolitan Court) in the last 3 months, bulk orders are expected in this FY
- In the Private Market, HTS Panel has started to appear in Tenders for new projects (including, Capgemini, Torrent), a shift from the current retrofit channel in private
- **Revenue for this FY is projected to double from last year**



PERFECT
INFRAENGINEERS LTD.

Thank you!