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# IEA Workshop on industry energy efficiency

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17<sup>th</sup> March 2021



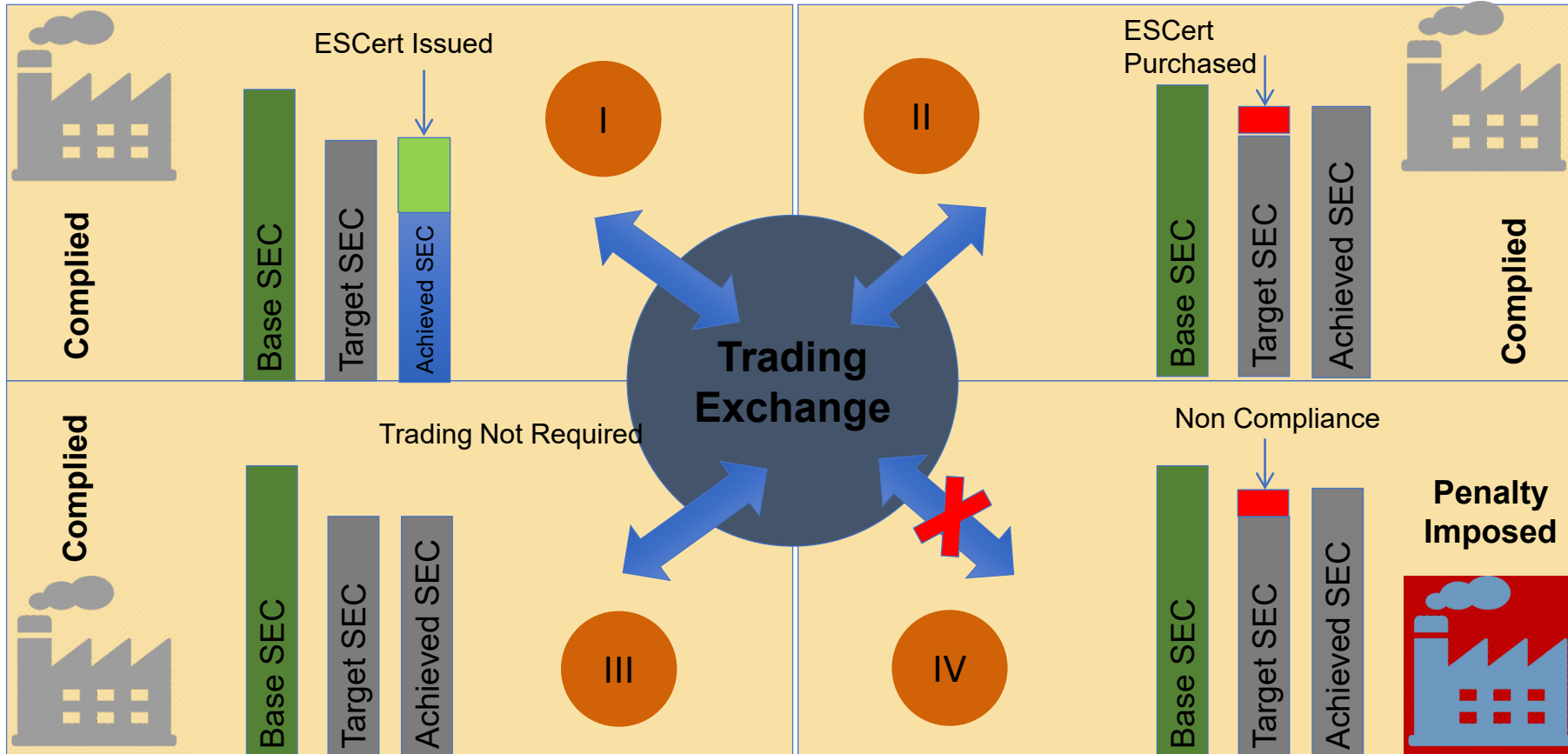
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# Perform, Achieve and Trade (PAT) Scheme

- Regulatory instrument linked with market mechanism
  - Certification of energy saving
- Consultative approach
  - Ministries/Designated Consumers (DCs)/Associations/FIs/Research Organizations
- Outreach/ Capacity Development
  - Workshops/Seminars/ Visits
- “Self – competing”
  - Unit specific targets
- Relative responsibility
  - Less target for more efficient and more for less efficient

# PAT Trading Mechanism



## PAT-1

- Around 1.3 million ESCerts were traded
- Transaction of about \$15 million

**SEC (Specific Energy Consumption):** Energy Consumed per unit production

# PAT Scheme- Achievements

## PAT-1 (2012-15)

8 Sector/ 478 DCs  
8.67 MTOE energy savings  
31 million tonnes CO2  
emission reduction

## PAT-2 (2016-19)

11 Sectors/ 621 DCs  
~14 MTOE energy savings  
~66 million tonnes CO2  
emission reduction  
~4.5 billion USD of saving

Airports (commercial  
building), Cement  
Grinding Units and  
Railway Workshops : new  
sub sectors in **next PAT  
Cycle**



## PAT-3,4,5,6

13 Sectors/ 1073 DCs  
~302 MTOE of Energy  
Coverage  
~50 % of India's total  
energy consumption

# No. of Designated Consumers(DCs) under PAT-II, III, IV, V & VI

S. No	Sectors	No. of DCs In PAT Cycle II (2016-19)	No. of DCs In PAT Cycle III (2017-20)	No. of DCs in PAT Cycle IV (2018-21)	No. of DCs in PAT Cycle V (2019-22)	No. of DCs in PAT Cycle VI (2020-23)
1	Aluminum	12	1	-	1	-
2	Cement	111	14	1	12	37
3	Chlor- Alkali	24	0	2	2	-
4	Fertilizer	37	0	-	-	-
5	Iron and Steel	71	29	35	23	5
6	Pulp and Paper	29	1	2	8	2
7	Textile	99	34	7	16	7
8	Thermal Power	154	37	17	17	-
9	Railways	22	0	-	-	-
10	Refineries	18	0	-	-	20
11	DISCOMs	44	0	-	-	-
12	Buildings	-	-	37	31	64
13	Petrochemicals	-	-	8	-	-
<b>Total</b>		<b>621</b>	<b>116</b>	<b>109</b>	<b>110</b>	<b>135</b>



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# PAT Scheme- Current Status

- **Total 6 cycles of PAT notified till March 2020**
- **1073 designated consumers (DCs) from Thirteen sectors covered**
- **Deepening and Widening of PAT scheme**
- **Feasibility study of 7 additional sectors conducted**
- **Threshold notified of airports under buildings sector**



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# PAT Scheme- Way forward

- **Further deepening and widening to cover almost entire segment of the energy intensive industries**
- **Notification of PAT Cycle-7**
- **Broad basing ESCerts market to make it more attractive and feasible**
- **Linking ESCerts to global carbon market**
- **Schedule of the EC Act, 2001 under progress to provide provision to include more sectors**
- **Expanding the scope of the PAT scheme to the SME segment**



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सत्यमेव जयते



*Thank You*