

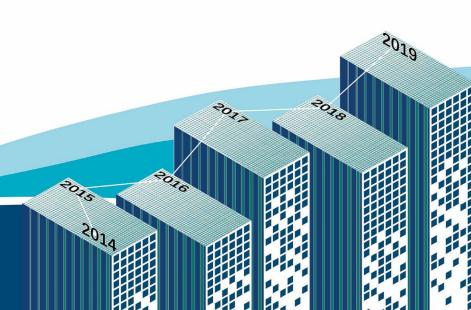


## The Story about APSEC

FIVE Years' Work Progress Since Its Foundation (2014.9-2019.9)

Li ZHU

President, APEC Sustainable Energy Center Professor, School of Architecture, Tianjin University





## CONTENT



- 01 WHO is APSEC?
- 02 WHAT does She Have?
- 03 WHAT can She Do?
- 04 WHAT does She Want?





## **CREATION**





# PART ONE



#### **Establishment of APSEC**



APSEC was established at the 11<sup>th</sup> APEC Energy Ministerial Meeting in 2014, which was also written into the 22<sup>nd</sup> APEC Leaders' Declaration. It is a major achievement of the Chinese government responding positively to the initiative of APEC leaders to participate in energy cooperation in APEC region.



"We welcome the Beijing Declaration of the 2014 APEC Energy Ministerial Meeting. We welcome the establishment of the *APEC Sustainable Energy Center* in China."

#### -from 2014 Leaders' Declaration

"We endorse the establishment of the APEC Sustainable Energy Center (APSEC) in China in 2014 to promote advanced ideas and models of sustainable energy development across the APEC region, and facilitate cooperation among member economies in information exchange, policy dialogue, technology R&D, demonstration and dissemination, and capacity building in the field of sustainable energy."

-from Beijing Declaration, 2014 APEC Energy Ministerial Meeting





## **Today's APSEC**



### **Within APEC**

ONE of the 24 APEC Specialized Centers.

ONE of the 2 Research Institutions in APEC Energy Working Group.

### **In China**

ONE of the 14 APEC institutions registered in the MFA.

The FIRST international energy organization led by National Energy Administration. APEC Sustainable Energy Center is affiliated to NEA.

ONE of the 2 International Think-tank Entities in Tianjin University. TJU is responsible for the daily operation and management.





#### **APEC** and China

**Working Group** 

and Task Force





APEC was formally established in Canberra, Australia in 1989. At present, APEC has 21 member economies, which are located in vast areas along the Asian and Pacific coast.

China joined APEC formally in November 1991 and is the second largest economy in APEC region. It's the first regional economic cooperation organization China participated in.



**Budget and** 

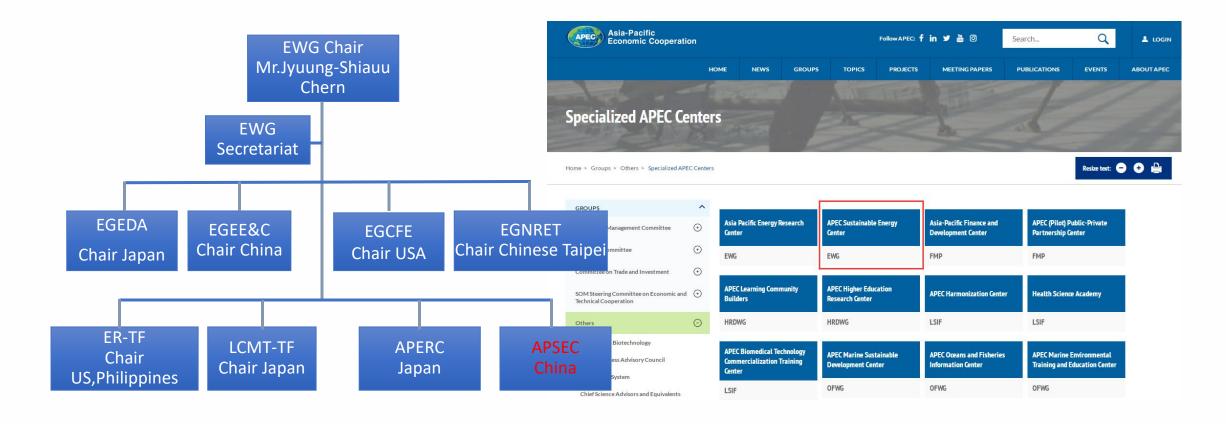
Management

Committee



#### **EWG and APSEC**











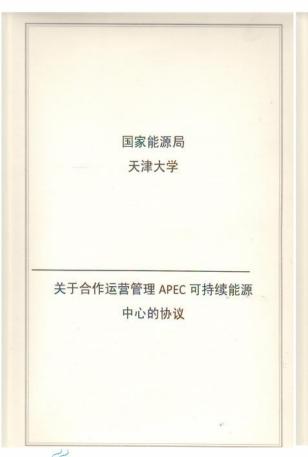
## **Specialties of APSEC**



#### Compared with APERC and similar IOs, APSEC has two unusual features

- A University responsible for its O&M
- A Young Professor as its President





(三)协议执行期间,如遇不可抗拒的情况产生(如国际合作形势、 国家法律、政策调整、政府决定等),导致本协议无法履行而终止,及 方互不追究违约责任。 (三)若出现以下事由之一时,本协议可随时提前解除;

- 双方均同意终止的,经双方另行签署协议后解除本协议,善后事项按另签协议约定执行;
- 如天津大学在 APSEC 运管管理上出现严重违纪、违规行为或严重失职、渎职行为,国家能源局有权随时单方终止本协议。
  - 五、协议的生效及其他
- (一)本协议于 2014 年 9 月 2 日签订,自签订之日起生效,至委 托期满后自然失效。
- (二)本协议如有未尽事宜,双方应本着相互尊重、友好协商的原则,及时做出补充规定,补充规定与本协议具有同等效力。
  - (三)本协议正本一式4份,双方各执2份。

国家能源局

天津大学



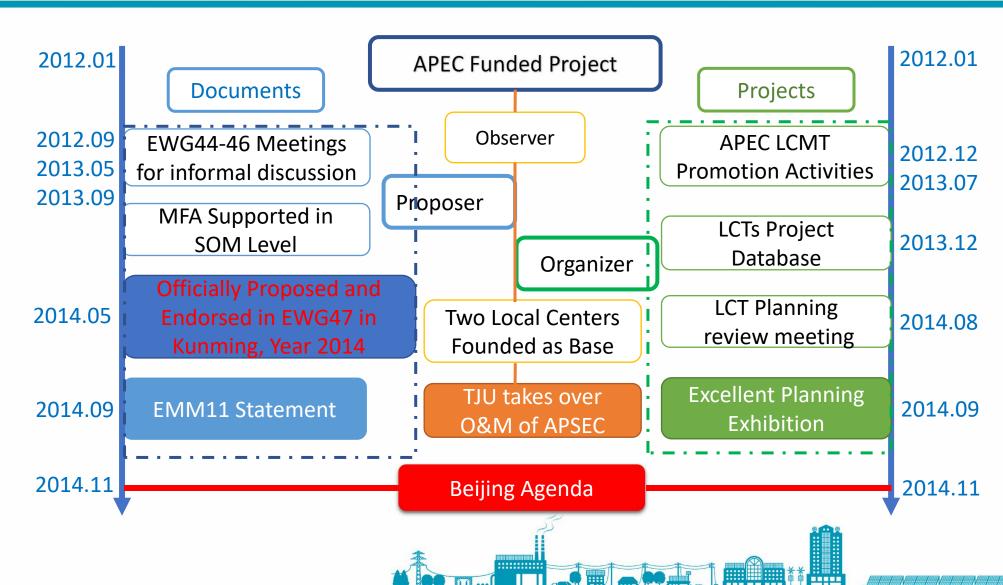






## **Origin of APSEC**







## **Today's APSEC**



After five years of construction and development, APSEC has completed institution building, with sufficient office space, a dynamic team and stable financial support. At the same time, APSEC has a clear vision, complete action plan and work objectives, profound brand international influence and effective resource integration mechanism.

**Entity construction** 

**Two Joint Operating Center** 

Three branches of government support

Two major school-level institutions and a training base

**Resource Integration Platform** 

**Three-level Committee of Experts** 

**Two Cooperative Networks** 

China's Participation in APEC Energy
Partnership Network

Promoting low-carbon energy transformation and achieving sustainable development in the Asia-Pacific region

APSEC adheres to the principle of "Chinese-led, APEC-based, World-oriented" and strives to become a brand of Tianjin University and a world-class energy research center.





## **NETWORKS** with a CORE





# PART TWO



## **Entity Core of APSEC**



#### **OFFICE**

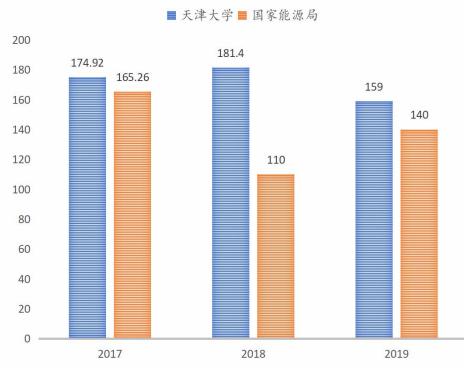


Located in the Library on campus, over 300m<sup>2</sup> working space and 12 offices.

#### **PERSONNEL**



#### **BUDGET**



Sustainable financial support from NEA and TJU







## **Intelligence Network**



APEC Advisory Board Committee has 16 experts from 9 economies; 38 domestic experts; University academic committee chaired by President Jin Donghan.





## **Program Joint Operation Centers**













#### **APEC CNSC Networks**



#### **City Network**







#### **Service Network**













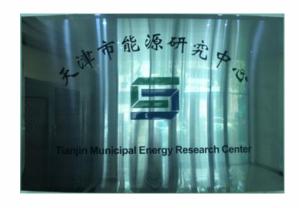


#### **Local Extensions**



3 Tianjin institutions: Development and Reform Commission, Science and Technology Bureau, and Housing

#### **Construction Committee**







<u>2 University-level institutions: Sustainable Energy Research Center of Tianjin University,</u>

<u>Tianjin University International Organization Internship Base</u>









#### **Joint Bases**

Research 禁

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#### **Training Base**





APSEC国际培训基地 国家电网有限公司客户服务中心 **APSEC Training Base** State Grid Customer Service Center



#### **R&D** and Testing Base







### **Secretariat to NEA's Network**





Secretariat (APSEC)

## EGs' Counterparts

Energy Research Institute National Development and Reform Commission

Electric Power Planning & Engineering Institute

PetroChina Planning and Engineering Institute

China National Institute of

## TFs' Counterparts

Tianjin University

China Renewable Energy Engineering Institute

\_\_\_\_\_\_\_









## **SERVICE**



# PART THREE



#### **All about Service**



- APSEC serve APEC
  - -with information sharing, capacity building activities, project researches etc.
- APSEC serve NEA
  - -with information collection and analysis, project researches etc.
- APSEC serve TJU
  - -with students & personnel cultivation, international brand building etc.
- APSEC serve Cities
  - -with sustainable planning and energy transition solutions etc.
- APSEC serve Companies
  - -for technology transfer and application in APEC region.



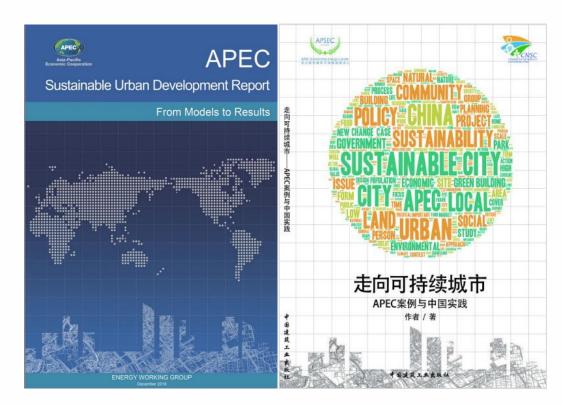




### **Program Research**



Continuous implementation of two pillar programs, namely APEC Cooperative Network of Sustainable Cities (CNSC) and Clean Coal Technology Transfer (CCT). Producing high-level research results and core publications.





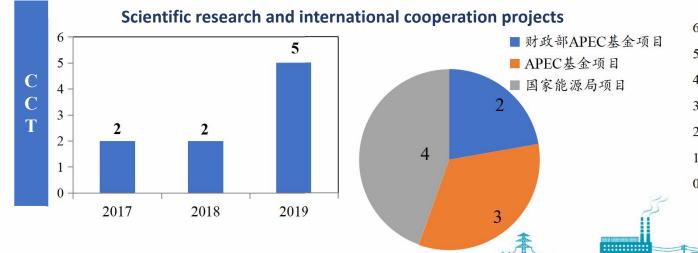


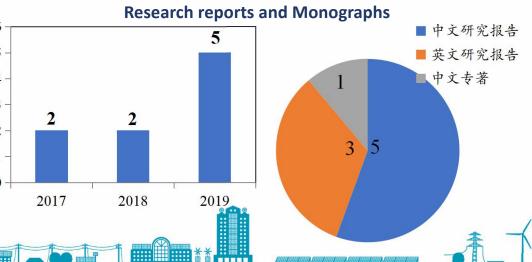


## **Project Research**



C N S C	Year	Projects	Results
	2017	National Energy Administration project <b>APEC (China) Low Carbon Town Development Model Research.</b>	APEC (China) Low Carbon Town Development Model Research Report.
	2018	APEC Self-financing projects <b>EWG 11 2018S - Research on Effective Strategies for Overcoming the APEC Sustainable Urbanization Gaps.</b>	<ul> <li>1.APEC publicationAPEC Sustainable Urban Development Annual Report— From Models to Results</li> <li>2. Chinese books Towards Sustainable Cities: APEC Case and China's Practice.</li> </ul>
	2019	NEA project <i>The Form and Excellent Practice of Sustainable Urban Low Carbon Energy System</i> ; APECSelf-financing project <i>EWG 12 2018S - Research on Forms of Low-carbon Energy System and Best Practices for APEC Sustainable Cities.</i>	<ol> <li>Research report The Form and Excellent Practice of Sustainable         Urban Low Carbon Energy System.</li> <li>Research report Research on Forms of Low-carbon Energy System         and Best Practices for APEC Sustainable Cities.</li> </ol>



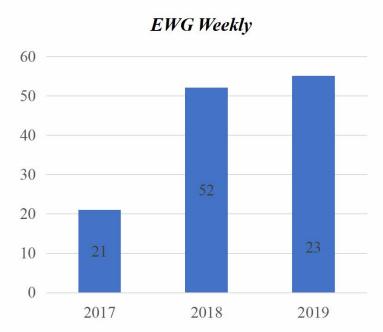




## **Information Analysis**



Weekly submission of EWG News Letter Weekly, monthly Working Reports, annual publication of "Analysis of the status quo and trend of energy cooperation in APEC region" to provide reference materials for the National Energy Administration to carry out APEC energy international cooperation. A total of 102 news letters and 30 working reports were submitted.



Year	Analysis report of the status quo and trend of energy cooperation in APEC region
2017	Analysis of the status quo and trend of energy cooperation in APEC region  (APEC projects)  Analysis of the status quo and trend of energy cooperation in APEC region  (APEC actvities)
2018	《Report on China's participation in APEC energy cooperation 2006-2017》





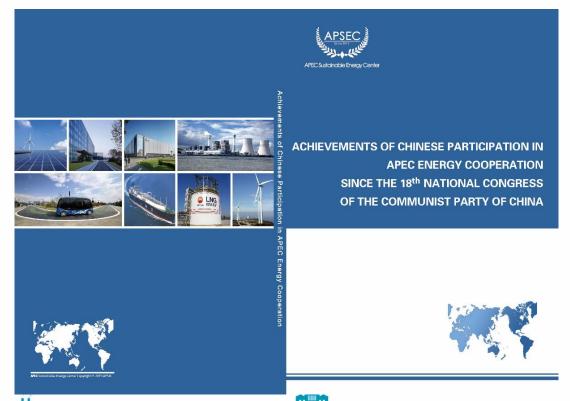


## **Analysis Report**



In order to actively respond to the new opportunities and new challenges brought about by the adjustment of the global pattern and the tremendous changes in the world situation, NEA has made active strategic deployment and work arrangements in deepening and broadening Chinese participation in APEC energy. This report systematically sorts out the main work and important achievements of this period.









## **Training & Awards**



APSEC has provided 6 training sessions for more than 200 participants from 15 economies in APEC, invited 27 lecturers from 7 economies, and produced 3 sets of textbooks.









## **CCT Training in Ningbo**





40 representatives from 10 APEC economies participated in this exchange and training activity. The Lead Shepherd of the APEC Energy Working Group praised this exchange and training activity as the most comprehensive and successful in the field of clean coal technology under APEC Energy Working Group for the past decade.

Exchange and Training on Clean Coal Technology and Clean Energy Policywas successfully held in Ningbo.For the first time, the APSEC event was promoted and reported to 21 APEC economies on the APEC official website, and China Global Television Network(CGTN) also featured a special report on this event.









Grid Customer Service Center.

### **ESCI Award Breakthrough**



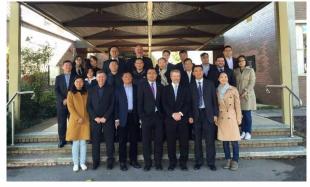




#### **Technical Tours**



Since 2016, the APEC Sustainable Energy Center has organized six international technical tours on energy and urban development, including Australia; New Zealand; Singapore; Indonesia and Hong Kong, China and the Philippines.















## **Annual Flagship Cities Workshop**



#### **APEC Workshop on Sustainable Cities**







4th APEC Workshop on Sustainable Cities

May 22,2019 Taguig City-Philippines





2<sup>nd</sup> APEC Workshop on Sustainable Cities

April 25,2017

Singapore







3rd APEC Workshop on Sustainable Cities

Hongkong-China May 15,2018



1st APEC Workshop on Sustainable Cities Canberra · Australia

Singapore Hong Kong, China ..... **Fourth** First May, 2019 May, 2016 Taguig City, Philippines Canberra, Australia

**Third** 

May, 2018



Second April, 2017





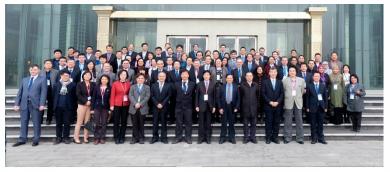
## **Annual Flagship Energy Forum**



#### **Asia-Pacific Sustainable Energy Development Forum**



4th Asia-Pacific Energy
Sustainable Development Forum
September 20-21,2018 Tianjin · China



2<sup>nd</sup> Asia-Pacific Energy
Sustainable Development Forum

November 3-5,2016 Tianjin • China





3<sup>rd</sup> Asia-Pacific Energy
Sustainable Development Forum
September 21-22,2017 Tianjin · China





1<sup>st</sup> Asia-Pacific Energy Sustainable Development Forum

September 21-22,2015 Tianjin • China







#### **Information Platform**



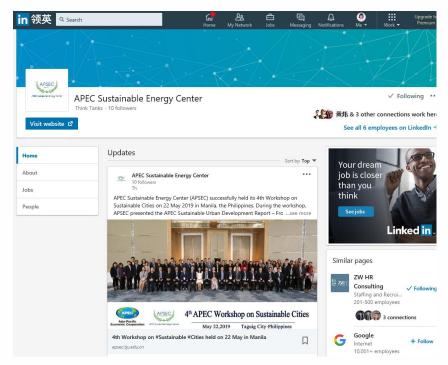
#### **Official Website**

http://apsec.tju.edu.cn/



#### **Organization Page on LinkedIn**

https://www.linkedin.com/company/apec-sustainable-energy-center



#### **WeChat Official Account**



#### **Weibo Official Account**









## Recognitions



APEC 可持续能源中心成立于 2014 年第 11 届 APEC 能源部长会议,是国家能源局牵头成立的第一家国际能源合作机构。自 APSEC 成立以来,国家能源局高度重视它的发展。经过五年建设发展和三年行动计划(2017-2019)的有效执行,APSEC 实体机制、支柱项目、咨政服务和信息平台建设从无到有,在国际交流、品牌论坛和研究工作方面成效显著。发布了首部 APEC 出版物《APEC 可持续城市发展报告——从模式到成果》(英文),完成了咨政报告《十八大以来中国参与APEC 能源合作成果回顾》(中英文),成功举办了 APEC 能源工作组十多年来最成功的清洁煤技术培训,实现了我国在APEC 能源智慧社区最佳实践奖获奖"零的突破"。这五年期间,APSEC建设取得了显著成果,实现了良好发展,获得了入户区域区域。

APEC Sustainable Energy Center (APSEC) was established at the 11th APECEnergy Ministerial Meeting in 2014, and it's the firstinternational energy organization led by National Energy Administration. Since its establishment, National Energy Administration has attached great importance to APSEC's development. After five years 'construction and development as well as the effective implementation of the three-year work plan (2017-2019), APSEC has achieved breakthroughs in institutional building, pillar programs, think-tank services and information platform, achieved significance in international exchanges,



#### Key Conclusion of EWG57

23-24 May 2018 Manila, The Philippines

#### A. Project management:

 Members are requested to reach relevant Project Overseers to submit the completion reports and monitoring reports of APEC projects on time.

#### B. EGs/TFs/Centres:

- APERC is advised to make a report addressing energy security risks and issues for members' reinvestigation of Energy Security Initiative in EWG58 meeting.
- Expert groups are advised to update contact lists regularly and to enhance outreach to enrich membership, especially from private sectors and academia.
- EWG supports APSEC to continue its contribution to EWG for the next 5-year period.
- Members are encouraged to provide timely and high-quality data to EGEDA.
- APEC Energy Supply and Demand Outlook 7<sup>th</sup> edition:

   Members are encouraged to disseminate key findings and conclusions domestically.
  - -APERC is advised to report the findings to ABAC.
- EGEEC is advised to discuss whether ESIS will be terminated in its next EG meeting and to report the decision in the next EWG meeting.



## **SUSTAINABILITY**

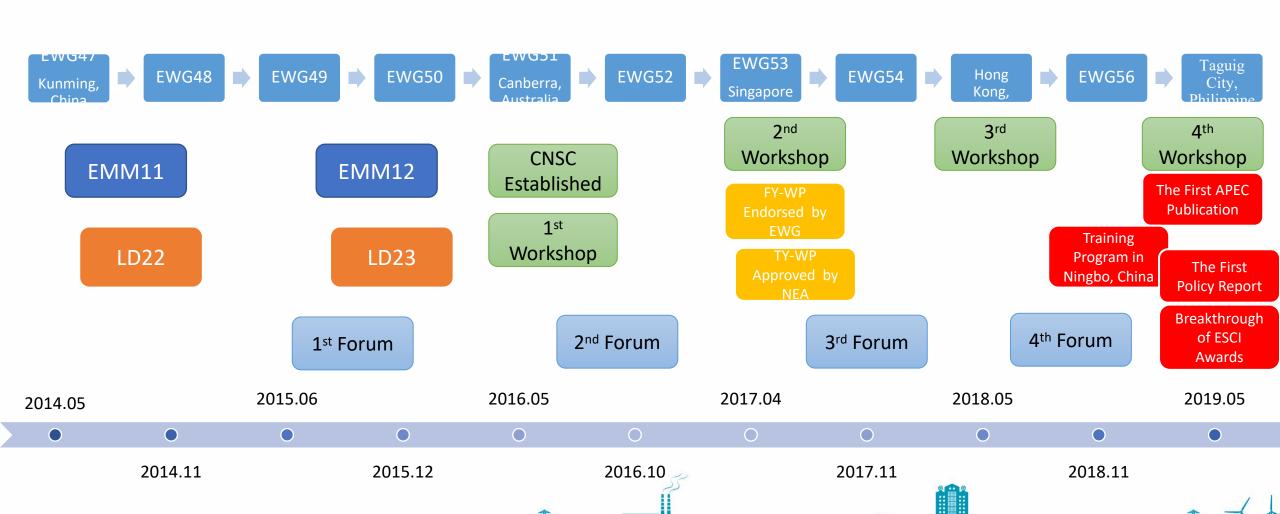






## Ready for Entering the New Stage







## New Three Work Plan (2020-2022)













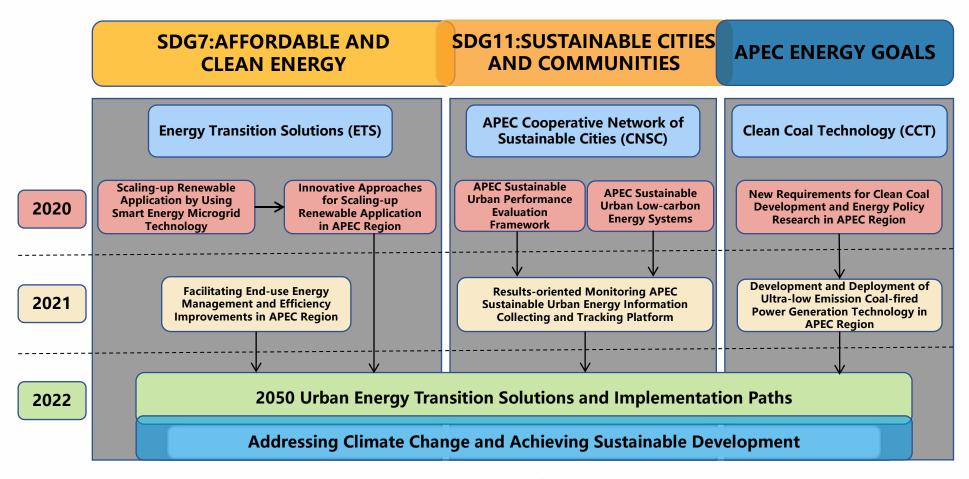






## New Three Work Plan (2020-2022)











# THANK YOU!







