

# Industry-university-research university cooperation alliance for carbon peak and carbon neutral



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## Introduction

It is urgent to combine the main forces in the current development process of carbon neutralization, industry, University, research and application to build a graduate training alliance. In view of the top-level strategic needs of national carbon neutralization, we should further meet the national needs in the process of graduate training, increase the foundation and strengthen the ability training of graduate students in carbon neutralization related majors, adjust and optimize the training content, methods, mechanisms and strategies, etc. So as to strengthen the role positioning and function play of relevant professional graduate students in the process of carbon emission reduction and carbon neutralization in the future, and meet the development requirements of national carbon peak and carbon neutralization.

## Methods

Establish a mentor alliance, relying on projects and topics, to guide graduate students of different grades at different stages, and the tutor alliance will give guidance and the direction and ideas of the next step of research to the students' reports at different stages, point out the problems and solve the problems. Promote students' theoretical level and ability to solve practical problems will be greatly improved, so as to achieve a substantial improvement in the quality of training and innovation ability.

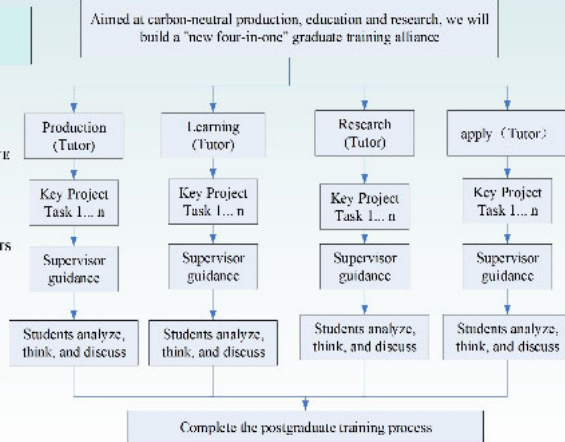
## Conclusion

- Point one
  - The cultivating mode of carbon-neutral production-school-research-user alliance
- Second conclusion
  - Curriculum system that focus on the basics、highlight the modern、reflection front、Cross synthesis
- Last point of interest
  - Multi-mentor and multi-level assessment to improve the quality of cultivating

## "new four-in-one" graduate training alliance

## Objectives

- Objective one
  - AIMING AT CARBON-NEUTRAL PRODUCTION, EDUCATION AND RESEARCH, WE WILL BUILD A "NEW FOUR-IN-ONE" POSTGRADUATE TRAINING ALLIANCE
- Objective two
  - ESTABLISH A NEW CURRICULUM SYSTEM FOR GRADUATE STUDENTS FOR CARBON NEUTRAL PRODUCTION, EDUCATION AND RESEARCH
- Objective three
  - IN THE FORM OF MULTI-TUTOR ALLIANCE, THE KEY INSPECTION STAGE OF THE PROJECT IS THE STAGE ASSESSMENT OF GRADUATE STUDENTS, AND THE TRAINING QUALITY AND INNOVATION ABILITY OF GRADUATE STUDENTS ARE COMPREHENSIVELY IMPROVED
- Objective four
  - SET UP "PRODUCTION-RESEARCH-USE" SPECIAL PRACTICE COURSES TO COMPREHENSIVELY IMPROVE THE COMPREHENSIVE STRENGTH AND EMPLOYMENT COMPETITIVENESS OF GRADUATE STUDENTS



## References

1. Weijiang, Pan Weiguo, Ren Siyuan, et al. Exploration and practice of energy power graduate training to the goal of "dual carbon" [J]. China Electric Power Education, 2021(S1):251-252.
2. Wang Feng, Wu Chengxin, Zhang Shun. Construction of a collaborative training mechanism for professional degree graduate students: Take the asset appraisal major as an example [J]. The Chinese University of Science and Technology, 2019(08):54-57.
3. Liang Chaonjie, Mai Lijiang, Fan Fan. Exploration and practice of team-style graduate student training mode under the background of "Double First-class" construction [J]. Degree and Graduate Education, 2018(05):11-18.
4. Du Dong, Pang Qinghua, Jiang Yadong. Research on "Collaborative" Graduate Training Model under the Collaborative Innovation Environment [J]. Education and Teaching Research, 2014,28(01):86-90.
5. Bi Shanshan. Research on the reform of Professional Degree Students in China [D]. Wuhan: Wuhan University of Technology, 2015.
6. Tian Jing. The Comparison and Enlightenment of Professional and Collaborative Graduate Training Mode [J]. Human Social Science, 2013(01): 286-289.
7. Li Gang, Gu Ruiheng, Xu Ming, et al. Exploration of improving the scientific research and innovation ability of mechanical postgraduates under the "Five-in-one" training mode: Take East China Jiaotong University as an example [J]. Journal of Higher Education, 2022, 5(18):29-32.
8. Meng Qinghua. Discussion on the Cultivation Mode of Professional Master Degree Postgraduate of Vehicle Engineering under the Background of New Engineering: Taking the Vehicle Engineering Major of Hangzhou Dianzi University as an Example [J]. Modern education clothes in China 2022 (11): 94-96.