

A) General Information



Acronym: AFPM-W-H

Title of the User-Project: Testing locally manufactured axial flux permanent Generators (AFPM) for small wind and small hydro applications

TA Call: June, 30th 2012

Host Research Infrastructure: ICCS NTUA - TA9

Starting Date: 3rd of September 2012

End Date: 14th of September 2012

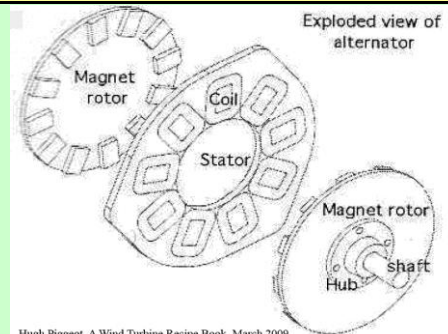
Lead User : Joerg Alber, Hochschule für Technik und Wirtschaft Berlin (HTW), Germany

Additional Users: --

B) Summary of the User-Project

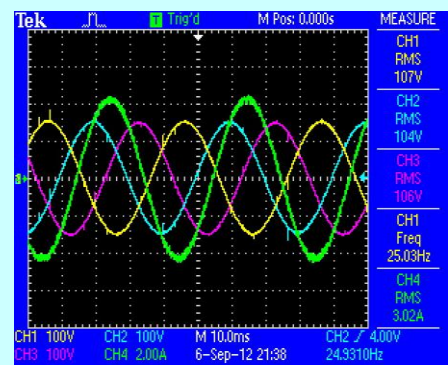
Research on the performance of locally manufactured axial flux permanent magnet (AFPM) generators.

Focus: small scale wind- and hydro applications, rural electrification projects and educational purposes within European-wide engineering departments.



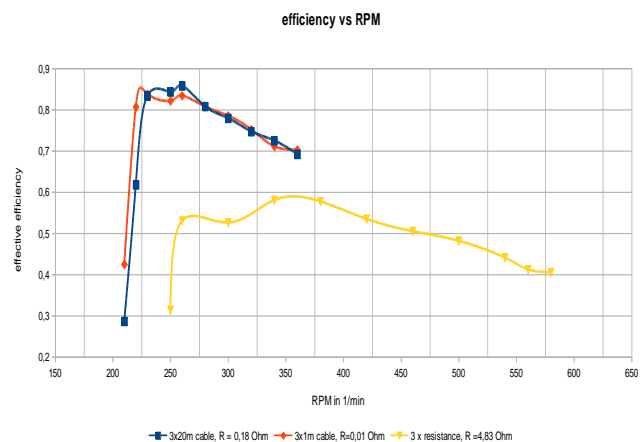
C) Main Achievements (Results)

- The high quality and efficient performance of the AFPM generators has been scientifically demonstrated.
- A reliable and efficient measuring campaign has been developed for reliable and effective quality- and safety-checks of such generators.
- Various ways of adjusting and fine-tuning the interaction between the generator and its rotor blades have been analysed, aiming at higher efficiencies of small wind turbine systems.
- The foundations for educational activities within technical institutions have been laid.
- Strong links and ideas for further exchange-projects between the participating organizations have been developed.



D) Dissemination of the Results (Planned)

- Educational courses with undergraduate students both at HTW-Berlin and ICCS-NTUA-Athens on the basis of the experiences of this TA-project.
- Contribution to the non-commercial and freely accessible development of small scale renewable technology via websites and forums in the internet.



E) Use of the Resources (Expected)

Nr. of Users involved: 1

Access Days: 10

Stay Days: 13