

University of Groningen

Power to the pedals

Plazier, Paul Arnaud

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2018

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Plazier, P. A. (2018). *Power to the pedals: Perspectives on the potential of e-bike mobility for sustainable and active transport systems*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

*perspectives on
the potential
of e-bikemobility
for sustainable
and active
transport systems*

The research presented in this book was conducted at the Faculty of Spatial Sciences of the University of Groningen, the Netherlands

ISBN: 978-94-034-0747-0

ISBN (E-Publication): 978-94-034-0746-3

Cover design: Jesse Schaap, grafisch ontwerper (www.jesseschaap.nl)

Printed by: ProefschriftMaken || www.proefschriftmaken.nl

© **P.A. Plazier, 2018**. All rights reserved. Save exceptions stated by law, no part of this publication may be reproduced in any form, by print, photocopying, or otherwise, without the prior written permission from the author. p.a.plazier@gmail.com



university of
 groningen

Power to the pedals

Perspectives on the potential of e-bike mobility for sustainable
 and active transport systems

PhD thesis

to obtain the degree of PhD at the
 University of Groningen
 on the authority of the
 Rector Magnificus Prof. E. Sterken
 and in accordance with
 the decision by the College of Deans

This thesis will be defended in public on

Thursday 5 July 2018 at 12.45 hours

by

Paul Arnaud Plazier

born on 3 October 1991
 in Groningen, the Netherlands

Supervisor

Prof. A.E. van den Berg

Co-supervisor

Dr. S.G. Weitkamp

Assessment Committee

Prof. D. de Waard

Prof. J.F. Jeekel

Prof. K.J. Krizek

*“Ladies and gentlemen,
boys and girls, friends
and enemies.*

*Meet the future mode
of transportation for
this weary Western
world! Now I’m not
gonna make a lot of
extravagant claims for
this little machine.*

*Sure, it’ll change your
whole life for the better,
but that’s all.”*

*(bicycle salesman in Butch Cassidy
and the Sundance Kid, 1969)*

Table of contents

Chapter 1	Introduction	1
Chapter 2	Exploring the adoption of e-bikes by diverse user groups	11
Chapter 3	“Cycling was never so easy!” An analysis of e-bike commuters’ motives, travel behaviour and experiences using GPS tracking and interviews	23
Chapter 4	The potential for e-bike use among the younger population: a study of Dutch students	43
Chapter 5	E-bikes in rural areas - current and potential users in the Netherlands	63
Chapter 6	Discussion	83
	<i>References</i>	101
	<i>Nederlandse samenvatting</i>	117
	<i>Dankwoord</i>	123
	<i>Over de auteur / about the author</i>	125

Publications

Four chapters in this thesis are reprints of publications or manuscripts:

- Chapter 2** Plazier, P.A., Weitkamp, G., Van den Berg, A.E. Exploring the adoption of e-bikes by diverse user groups. Under review at *Frontiers in Built Environment – Transportation and Transit Systems*.
- Chapter 3** Plazier, P.A., Weitkamp, G., Van den Berg, A.E., 2017. “Cycling was never so easy!” An analysis of e-bike commuters’ motives, travel behaviour and experiences using GPS-tracking and interviews. *Journal of Transport Geography* 65, 25–34.
- Chapter 4** Plazier, P.A., Weitkamp, G., Van den Berg, A.E., 2017. The potential for e-biking among the younger population: a study of Dutch students. *Travel Behaviour and Society* 8, 37–45.
- Chapter 5** Plazier, P.A., Weitkamp, G., Van den Berg, A.E., E-bikes in rural areas – current and potential users in the Netherlands. Accepted with revisions at *Transportation Research Part A: Policy and Practice*.

