

Kiwa; your partner for progress Testing, Inspection & Certification

Introduction

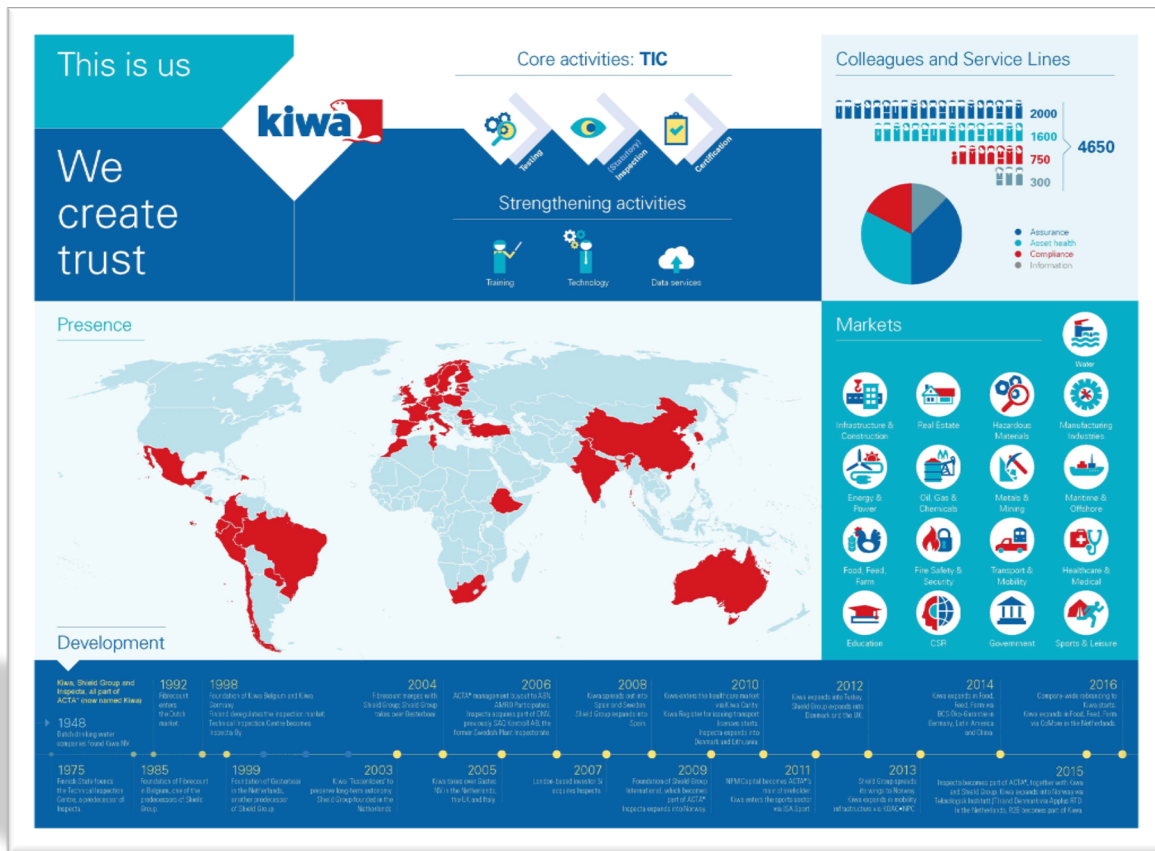


Kiwa Nederland B.V.
Automotive

**Trust
Quality
Progress**



This is us



Markets



Metals &
Mining



Paper & Pulp



Maritime &
Offshore



Oil, Gas &
Chemicals



Sports &
Leisure



Water



Energy



Construction &
Infrastructure



Food, Feed &
Farm



Consumer
goods



Automotive &
Aviation



Transportation
& Mobility



Medical,
Health & Care



Public
Services



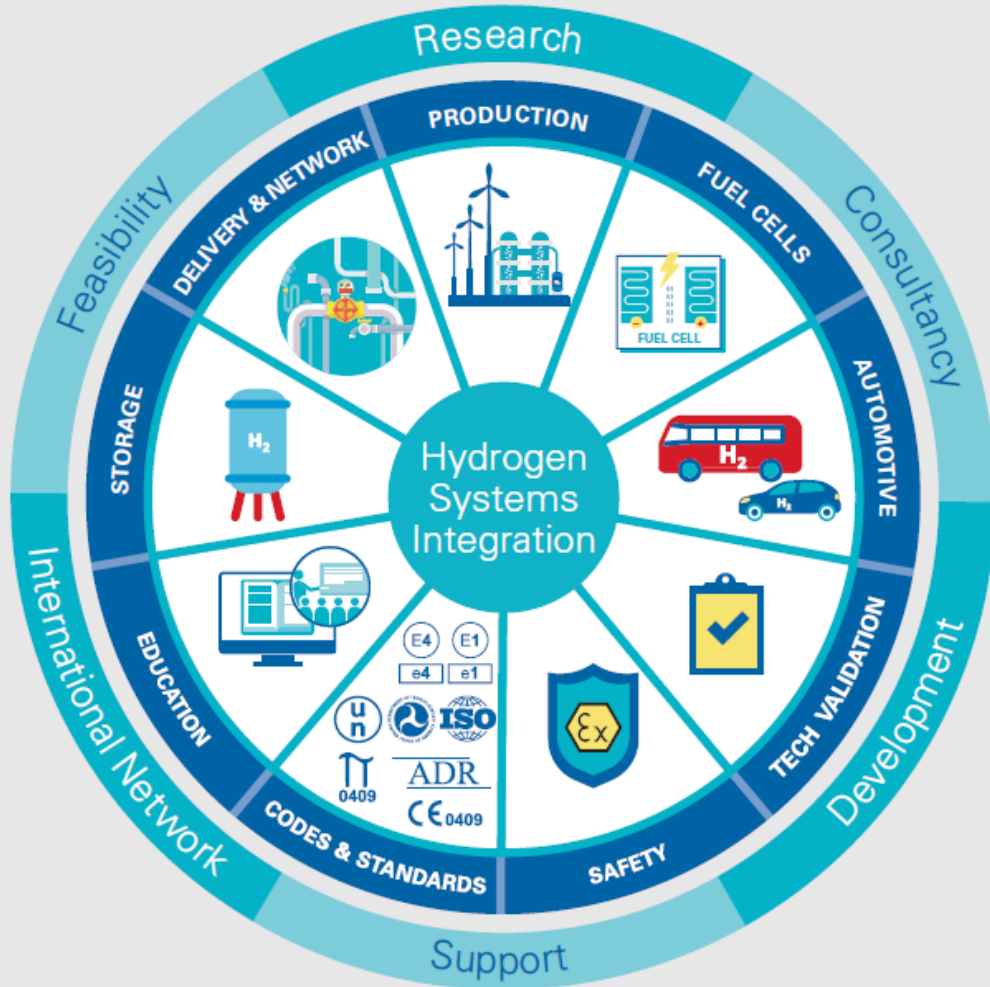
Industrial assets
& Installations



Safety &
Security

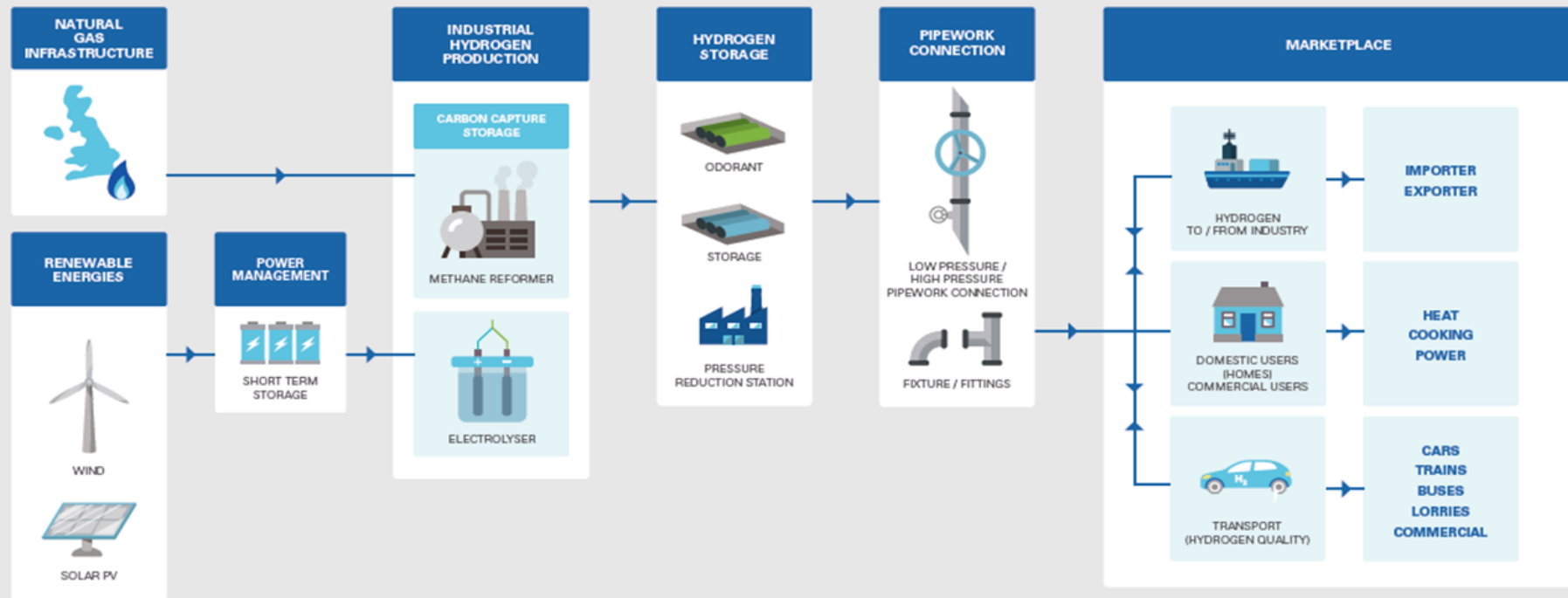


Real estate &
Facilities



K I W A S E R V I C E S

HYDROGEN LANDSCAPE



Kiwa, your partner in Automotive!

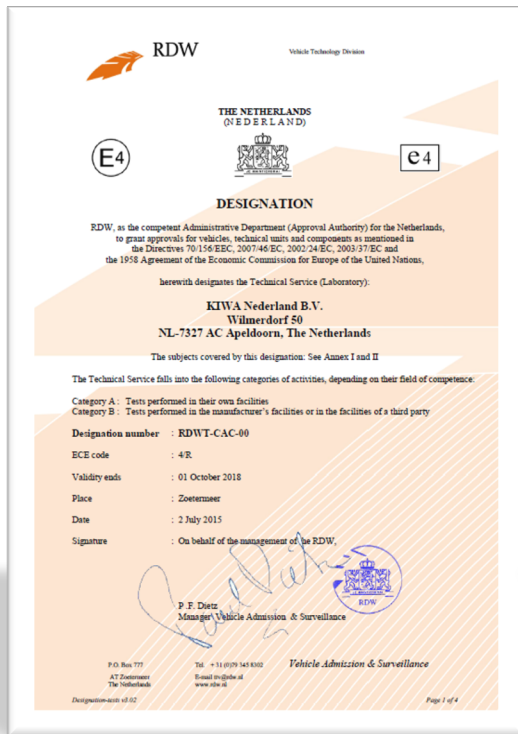
■ Automotive department (Alternative Fuels and Pressure Products)

- Testing, Inspection and Certification services of Vehicles & Automotive components for LPG, CNG, LNG and H2, as well as EMC, high pressure & wide range of climatic tests and other environmental.
- Authorized Technical Service for European vehicle Authorities:
 - **E4** certification by the Dutch Vehicle Authority (RDW),
one of the most renowned certification authorities in the world
 - **E1** certification by the KBA (Federal Motor Transport Authority) of Germany.

Kiwa, your partner in Automotive!

Kiwa Nederland B.V.

■ Automotive department



This is a notification certificate from RDW (Rijksdienst voor het Verkeer en Waterweg) in The Netherlands. It designates Kiwa Nederland B.V. as a technical service (laboratory) for vehicle approval. The certificate includes the RDW logo, the Dutch coat of arms, and various regulatory references. It specifies the designation number RDWT-CAC-00, ECE code 4R, and validity until 01 October 2018. The certificate is signed by P.F. Dietz, Manager Vehicle Admission & Surveillance, and includes contact information for RDW.

RDW
Vehicle Technology Division

THE NETHERLANDS
(NEDERLAND)

E4

e4

DESIGNATION

RDW, as the competent Administrative Department (Approval Authority) for the Netherlands, to grant approvals for vehicles, technical units and components as mentioned in the Directives 70/156/EEC, 2007/46/EC, 2002/24/EC, 2003/37/EC and the 1958 Agreement of the Economic Commission for Europe of the United Nations, herewith designates the Technical Service (Laboratory):

KIWA Nederland B.V.
Wilmerdorp 50
NL-7327 AC Apeldoorn, The Netherlands

The subjects covered by this designation: See Annex I and II

The Technical Service falls into the following categories of activities, depending on their field of competence:

Category A: Tests performed in their own facilities
Category B: Tests performed in the manufacturer's facilities or in the facilities of a third party

Designation number : RDWT-CAC-00
ECE code : 4R
Validity ends : 01 October 2018
Place : Zoetermeer
Date : 2 July 2015
Signature : On behalf of the management of the RDW,

P.F. Dietz
Manager Vehicle Admission & Surveillance

P.O. Box 177
AT Zoetermeer
The Netherlands

Tel +31 (0)20 145 8300
Email to/direct at
www.rdw.nl

Vehicle Admission & Surveillance

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RDW The Netherlands Notification



This is a designation certificate from KBA (Kraftfahrt-Bundesamt) in Germany. It certifies that Kiwa Nederland B.V. is a technical service (laboratory) for vehicle approval. The certificate includes the KBA logo, the Kiwa logo, and various regulatory references. It specifies the designation number EN ISO/IEC 17025:2005, and the testing laboratory is designated as technical service category A. The certificate is signed by P.F. Dietz, Manager Vehicle Admission & Surveillance, and includes contact information for KBA.

Designation

The Kraftfahrt-Bundesamt
herewith certifies that the testing laboratory

kiwa
Partner for progress

KIWA Nederland B.V.
Wilmerdorp 50
7327 AC Apeldoorn
The Netherlands

complies with
EN ISO/IEC 17025:2005
and has demonstrated appropriate skills, specific technical knowledge
and proven experience in accordance with 2007/46/EC.

The testing laboratory is designated as technical service category A.
(Scope see annex to the certificate)

This designation is valid from: 17 April 2012
The annex (3 pages) is an integral part of the certificate.
Registration number: KBA-P00033-12

On behalf

Osnabrück, 30 May 2012

Bismarckstraße 62
61187 Dresden
Germany
Phone: +49 351 47205-0

KRAFTFAHRT-BUNDESAMT
446

German flag

KBA Germany Notification

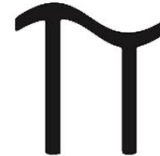
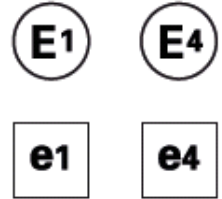
Kiwa Nederland B.V.
Automotive



Kiwa, your partner in Automotive!

Automotive department doing alternative fuels

- ☐ UNECE R10
- ☐ UNECE R110
- ☐ UNECE R67
- ☐ UNECE R115
- ☐ UNECE R134
- ☐ GTR. No. 13
- ☐ H2 directive 79-2009
- ☐ EN 12245
- ☐ ISO 1119-3
- ☐ ISO 15500
- ☐ ANSI/CSA NGV & HGV series
- ☐ DOT approvals
- ☐ KHK
- ☐ ADR / PED / TPED approvals



Kiwa, your partner in Automotive!

We offer a wide range of tests, such as:

- Shock temperature test, in extreme conditions
- Pressure cycles (up to 1.050 Bar)
- Test and pressure cycles with real gases (such as LPG, CNG, liquid nitrogen and Hydrogen)
- Determination of Kv or Cv value (estimated flow)
- Mechanical resistance test, in extreme conditions
- Emission and combustion tests (NOx, CO, CO2, etc.)
- Bonfire on gas cylinders
- Ballistic test on gas cylinders
- (Bio)gas analysis
- Hydrostatic tests (burst up to 4.500bar)
- Pressurized Hydrogen / Methane, etc.
- Temperature range / Thermal cycles
- Safety device Flow tests
- Leakage tests
- Endurance tests
- Particle / pollution tests
- Corrosion tests
- Vibration during environmental conditions
- UV Aging tests
- Non metallic material testing

One Stop Shop

When it comes to testing and certification of products, systems, processes and persons according to various codes of practice and national and international standards, KIWA is the worldwide one-stop-shop! Designated by national authorities we help customers through the entire process of testing and certification accurately and fast.



E4, E1, π Mark, ADR / RID, DOT, ISO, CE and many others!