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Hotel Hills Sarajevo, Bosnia and Herzegovina

A Unified Web-Based Architecture for Global Accreditation Verification

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Polish Institute of Halal



The Demand of Halal Certification

The global Halal ecosystem is valued at roughly \$2 trillion.

The increase of Halal Certification

The Increase of Certification Bodies (up to 200 HCBs)



When you see Halal Certificate

How do you verify?

- Scan QR
- Check the Halal standard used
- Check in the HCB website
- Contact HCB

If all verified, is it enough?

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Accreditation and Recognition



EIAC (Emirates International Accreditation Center)

Country
United Arab Emirates



وزارة الصناعة والتكنولوجيا المتقدمة
MINISTRY OF INDUSTRY & ADVANCED TECHNOLOGY

Ministry of Industry and Advanced Technology...

Country
United Arab Emirates



Halal Product Assurance Organizing Agency (Bada...)

Country
Indonesia



Moroccan Institute for Standardization (Institut...)

Country
Morocco



Department of Islamic Development Malaysia...

Country
Malaysia



وزارة الصحة العامة
Ministry of Public Health
دولة قطر - State of Qatar

Ministry of Public Health (Qatar)

Country
State of Qatar



Saudi Accreditation Center (SAAC)

Country
Kingdom of Saudi Arabia



المواصفات السعودية
Saudi Standards

Saudi Standards, Metrology and Quality...

Country
Kingdom of Saudi Arabia



الهيئة العامة للغذاء والدواء
Saudi Food & Drug Authority

SFDA (Saudi Food and Drug Authority)

Country
Kingdom of Saudi Arabia













Majlis Ugama Islam Singapura
(Islamic Religious Council of Singapore)

Islamic Religious Council of Singapore (Majlis Ugam...)

Country
Singapore



How to verify the accreditation?

Name	Country ↓	Website Validation
 EIAC (Emirates International Accreditation Centre)	United Arab Emirates	https://eiac.gov.ae/directory/
 Islamic Religious Council of Singapore (Majlis Ugama Islam Singapura...)	Singapore	https://file.go.gov.sg/fhcb-listing.pdf
 SFDA (Saudi Food and Drug Authority)	Kingdom of Saudi Arabia	https://api-halal.sfda.gov.sa/uploads/Clients/c4d2ffc9-9d45-44f4-...
 Saudi Standards, Metrology and Quality Organization (SASO)	Kingdom of Saudi Arabia	https://www.saso.gov.sa/en/sectors/product-safety/Documents/Cert...
 Saudi Accreditation Center (SAAC)	Kingdom of Saudi Arabia	https://saac.gov.sa/en/accredited-cabs/
 Halal Product Assurance Organizing Agency (Badan Penyelenggara J...)	Indonesia	https://bpjph.halal.go.id/datalhn/
 Department of Islamic Development Malaysia (JAKIM)	Malaysia	https://myehalal.halal.gov.my/portal-halal/v1/pdf/cb/CBLIST-20May2...
 Ministry of Industry and Advanced Technology (MOIAT)	United Arab Emirates	https://moiat.gov.ae/en/programs/halal/registered-halal-certification...
 Central Islamic Council of Thailand (CICOT)	Thailand	https://www.halal.or.th/storages/documents/download/110.pdf
 Ministry of Public Health (Qatar)	State of Qatar	https://qfrs.moph.gov.qa/GlobalHalalList.aspx?lang=en-US&csrt=96...



But, it takes time

▾

Memenuhi Syarat Registrasi

Hasil 1 hingga 1 dari 1

NO	NAMA LHLN / HCB NAME	ALAMAT / ADDRESS	LINGKUP KOMPETENSI / COMPETENCY SCOPE	MASA BERLAKU MRA
1	Polish Institute of Halal (PIH) (Polski Instytut Halal)	Poznan, Polandia	Food Beverages Drugs/Pharmaceuticals Slaughtering services	2028-05-03

H-CB 0032-1	POLSKI INSTYTUT HALAL (PIH) (POLISH INSTITUTE OF HALAL)		Europe – Poland	halal@halal.biz.pl Tel: +48 507754301 Legal Representative in KSA: saadph@hotmail.com 0508442248	Category: C Food Manufacturing Subcategory: CII : Products: Preserved fruits and vegetables including packaging. Subcategory: CIII :
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Last update: 20/11/2025

www.saso.gov.sa

الصفحة ٤٢ من ١٢٨

moiat.gov.ae/en/programs/halal/registered-halal-certification-bodies?accreditationTab=halal-certification-bodies&halalCertificateSearchText=po&halalCertificateCountry=158&halalCertificate...

[YouTube](#)
[Maps](#)
[Translate](#)
[News](#)
[SIHALAL](#)
[Adobe Acrobat Ho...](#)
[Console](#) | [Mapbox](#)

Number	Country	Certification Body	Issue Date	Expiry Date	Status	MOIT Certificate	AB certificate
1	POLAND	Polish Institute of Halal (Polski Instytut Halal) View Details	19/04/2021	18/04/2027	Active	Download	Download



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The Fragmented Halal Accreditation Bodies



A Dozen of Accreditation/recognition body



Many different links for verification

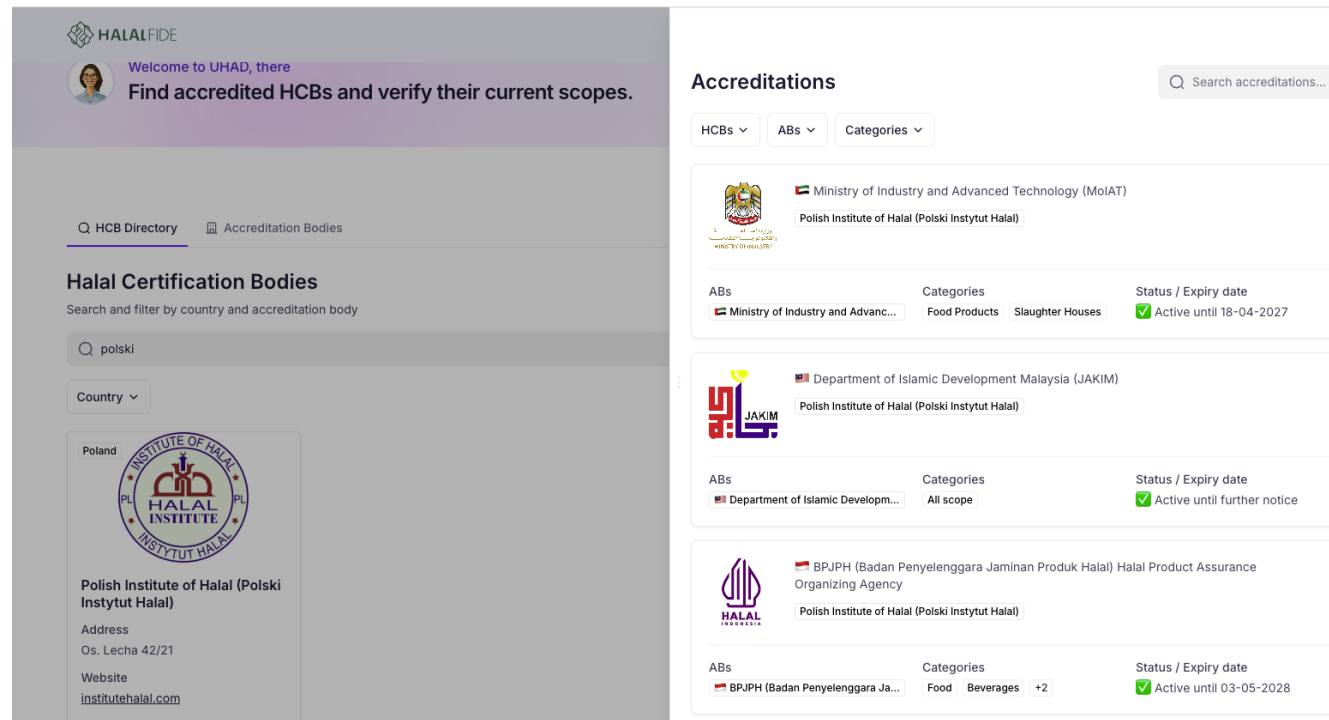


Verifying one HCB can take ages



Unified Halal Accreditation Database (UHAD)

- "Single Source of Truth"
- Verifying all accreditation in seconds



The screenshot displays the UHAD website interface. On the left, there is a navigation menu with 'Halal Certification Bodies' selected. The main content area shows a search for 'polski' in Poland, resulting in the 'Polish Institute of Halal (Polski Instytut Halal)' profile. The profile includes the institute's logo, address (Os. Lecha 42/21), and website (institutehalal.com). On the right, the 'Accreditations' section lists three entries:

ABs	Categories	Status / Expiry date
Ministry of Industry and Advanc...	Food Products Slaughter Houses	Active until 18-04-2027
Department of Islamic Developm...	All scope	Active until further notice
BPJPH (Badan Penyelenggara Ja...	Food Beverages +2	Active until 03-05-2028

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Unified Halal Accreditation Database (UHAD)

The propotype, please try using your mobilephone



www.congress.halal.ba



System Architecture

Backend Achitecture

Data
Aggregation

Data
Normalization

Database
Management

Frontend Delivery

Multidimensional Query

Dynamic Visualization



Technical Challenges and its mitigation



Data Aggregation

Inconsistent data source structure

moiat.gov.ae/en/open-data/open-data-apis

YouTube Maps Translate News SIHALAL Adobe Acrobat Ho... Console | Mapbox

Get Notified Bodies List

JavaScript (Fetch)

```
fetch('https://api.moiat.gov.ae/api/0/
PageNumber=1&PageSize=10')
.then(r => r.json())
.then(console.log)
.catch(console.error);
```

Copy

C# (HttpClient)

```
using var client = new
HttpClient();
var resp = await
client.GetAsync("https:
PageNumber=1&PageSize=1
resp.EnsureSuccessStatu
Console.WriteLine(await
resp.Content.ReadAsStri
```



Profil Layanan Informasi Publik Pengumuman Regulasi IDN

polSKI

Pilih Negara

ACREDITATION & MRA / MoU

Cari

Dynamic HTML

Open Data API

Memenuhi Syarat Registrasi

Hasil 1 hingga 1 dari 1

NO	NAMA LHLN / HCB NAME	ALAMAT / ADDRESS	LINGKUP KOMPETENSI / COMPETENCY SCOPE	MASA BERLAKU MRA
1	Polish Institute of Halal (PIH) (Polski Instytut Halal)	Poznan, Polandia	Food Beverages Drugs/Pharmaceuticals Slaughtering services	2028-05-03

H-CB 0032-1

POLSKI INSTYTUT HALAL (PIH) (POLISH INSTITUTE OF HALAL)



Europe – Poland

halal@halal.biz.pl

Tel: +48 507754301

Legal Representative in KSA:

saadph@hotmail.com

0508442248

Category: C Food Manufacturing

Subcategory: CII :

Products: Preserved fruits and vegetables including packaging.

Subcategory: CIII :

PDF Link

Last update: 20/11/2025

www.saso.gov.sa

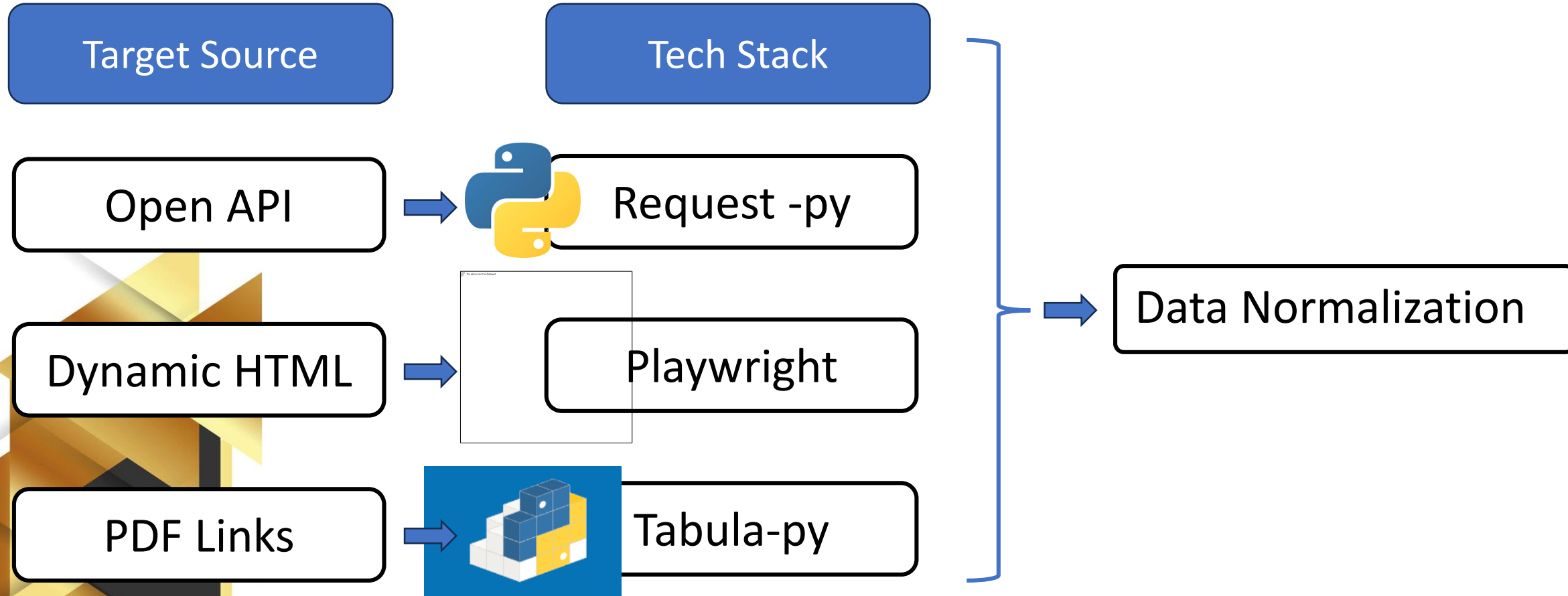
الصفحة ٤٢ من ١٢٨



السلطات السعودية
Saudi Standards



Data aggregation strategy



Data Normalization

Search results for 'polski' showing one result: Polish Institute of Halal (PIH) (Polski Instytut Halal).

- Polish Institute of Halal (PIH)...
- Polski Instytut Halal (PIH)...
- Polish Institute Halal (Polski...

Resulting in 3 different HCB

Fuzzy Matching
(Levenshtein/Jaro-Winkler)

Resulting in 1 unique HCB

- Similarity Threshold $\geq 90\%$
- Using keyfield as secondary determiner : web domain, city_country

congress.halal.ba

Browser address bar: moiat.gov.ae/en/programs/halal/registered-halal-certification-bodies?accreditationTab=...
Navigation icons: YouTube, Maps, Translate, News, SIHALAL, Adobe Acrobat Ho..., Console

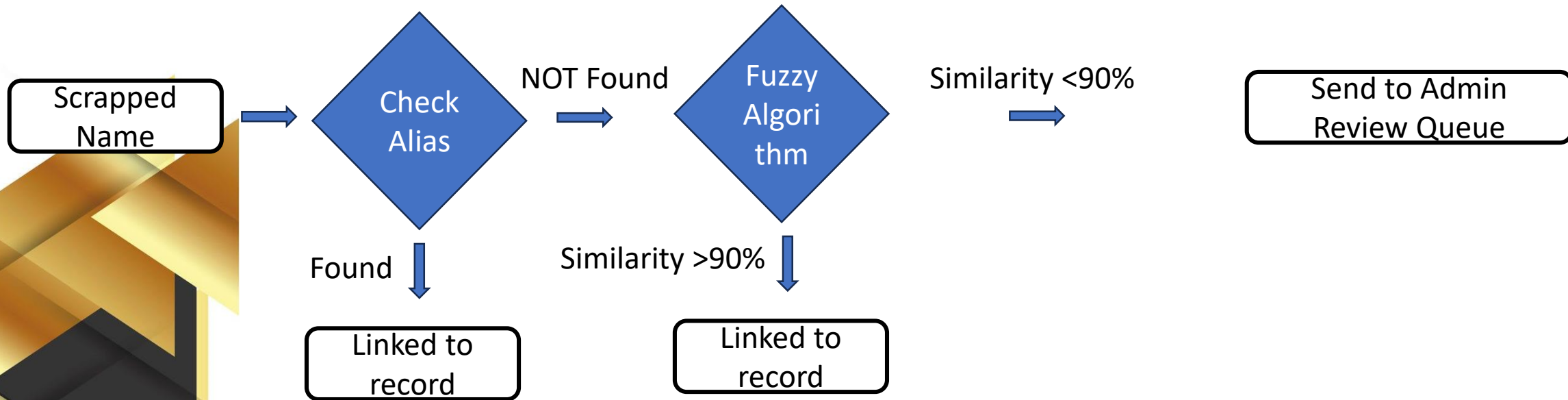
Number	Country	Certification Body
1	POLAND	Polish Institute of Halal (Polski Instytut Halal) View Details



Alias List

- Polish Institute of Halal (PIH)... = PIH
- Polski Instytut Halal (PIH)... = PIH
- Polish Institute Halal (Polski...=PIH

The Hybrid Approach



Data Normalization



Database Management

accreditations		
♂ ◆	id	uuid
◆	ab_id	uuid
◆	hcb_id	uuid
◇	certificate_number	text
◇	certificate_url	text
◆	expiry_date	date
◆	categories	_text
◆	created_at	timestampz
◆	updated_at	timestampz

profiles		
♂ ◆	id	uuid
◇	full_name	text
◆	role	user_role
◆	created_at	timestampz
◆	updated_at	timestampz

auth.users.id

hcbs		
♂ ◆	id	uuid
◆	name	text
◆	country	text
◇	email	text
◇	phone_number	text
◇	addr...	text
◇	alias...	_text
◆	created_at	timestampz
◆	updated_at	timestampz

abs		
♂ ◆	id	uuid
◆	name	text
◇	logo_url	text
◆	country	text
◇	website_url	text
◇	email	text
◇	phone_number	text
◇	addr...	text
◆	created_at	timestampz
◆	updated_at	timestampz

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Multidimensional Query

HALALFIDE
Welcome to UHAD, there
Find accredited HCBs and verify their current scopes.

HCB Directory Accreditation Bodies

Halal Certification Bodies
Search and filter by country and accreditation body

Q polski

Country ▾

Poland

Polish Institute of Halal (Polski Instytut Halal)

Address
Os. Lecha 42/21

Website
institutehalal.com

Accreditations

Search accreditations...

HCBs ▾ ABs ▾ Categories ▾

Ministry of Industry and Advanced Technology (MoIAT)
Polish Institute of Halal (Polski Instytut Halal)

ABs	Categories	Status / Expiry date
Ministry of Industry and Advanc...	Food Products Slaughter Houses	Active until 18-04-2027
Department of Islamic Developm...	All scope	Active until further notice
BPJPH (Badan Penyelenggara Jaminan Produk Halal) Halal Product Assurance Organizing Agency	Food Beverages +2	Active until 03-05-2028

HALALFIDE

HCB Directory Accreditation Bodies

Accreditation Bodies
Browse accreditation bodies and contact details

Country ▾ Accreditations ▾

Ministry of Industry and Advanced Technology
United Arab Emirates
Abu Dhabi 2166, United Arab Emirates

Website: https://moiat.gov.ae/en/ | Email: customercare@moiat.gov.ae | Phone N: +628

BPJPH (Badan Penyelenggara Jaminan Produk Halal) Halal Product Assurance Organizing Agency
Indonesia
Jl. Raya Pd. Gede No.13, RW.1, Pinang Ranti, Kec Makasar, Kota Jakarta

Website: https://bpjph.halal.go.id/ | Email: layanan@halal.go.id | Phone N: +628

HALAL INDONESIA

BPJPH (Badan Penyelenggara Jaminan Produk Halal) Halal Product Assurance Organizing Agency
Indonesia

Website: https://bpjph.halal.go.id/

Email: layanan@halal.go.id

Phone Number: +628111421142

Address: -

Accreditations

Search polski

Categories ▾

Polish Institute of Halal (Polski Instytut Halal)
Poznan, Poland
Poland

Categories: Food Beverages +2
Drugs/Pharmaceuticals, Slaughtering services

Expiry Date: Active until 03-05-2028



Dynamic Visualization

HALALFIDE 🔍

Welcome to UHAD, there 🔍 Search...

Find accredited HCBs and verify their current scopes.





🔍 HCB Directory 🏠 Accreditation Bodies










Halal Certification Bodies

Search and filter by country and accreditation body

🔍 Search HCBs...

Country ▾

<p>Bosnia</p>  <p>AGENCIJA ZA CERTIFICIRANJE HALAL KVALITETE BIH Agency for Halal Quality Certification Bosnia and Herzegovina www.halal.ba</p> <p>Agency for Halal Quality Certification</p> <p>Address Turalibegova 73, Tuzla</p> <p>Website halal.ba</p>	<p>Australia</p>  <p>AHAA Pvt. Ltd.</p> <p>Address Level 1, 2A Dargie Court Dallas, Victoria 3047</p> <p>Website halaladvisers.com.au</p>	<p>United States</p>  <p>American Halal Foundation (AHF)</p> <p>Address 10347 Cross Creek Blvd Suite C, Tampa, FL 33647, United States</p> <p>Website www.a-halal.com</p>	<p>OMAN</p>  <p>Atyab international Services LLC</p> <p>Address Muttrah / Muscat Governorate</p> <p>Website ais-mea.com</p>
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Conclusion



The Unified Halal Accreditation Database (UHAD) was developed to solve data fragmentation in the accreditation verification level



The system successfully reduces verification latency to seconds.



Ultimately, this prototype creates a cross-regional "single source of truth" that protects the integrity of global Halal certifications.



THANK YOU FOR ATENTION



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www.institutehalal.com

