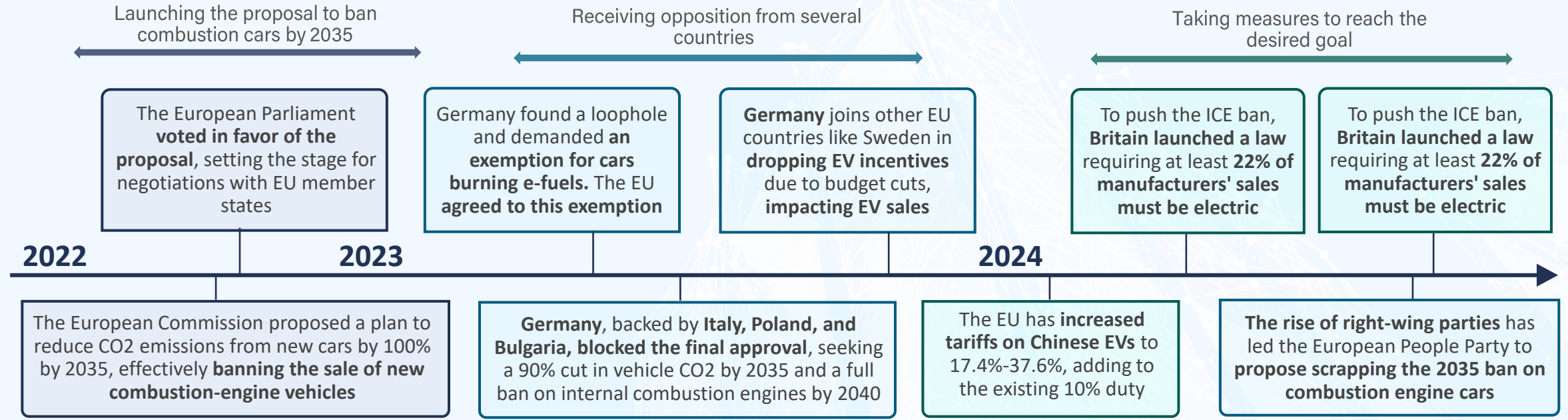


IS EV DOMINATION POSSIBLE IN EUROPE?



THE FEASIBILITY OF EU'S PLAN TO BAN COMBUSTION ENGINES BY 2035 IS SEVERELY QUESTIONED AS MAJOR CAR-PRODUCING COUNTRIES LIKE GERMANY AND ITALY ARE OPPOSED TO IT



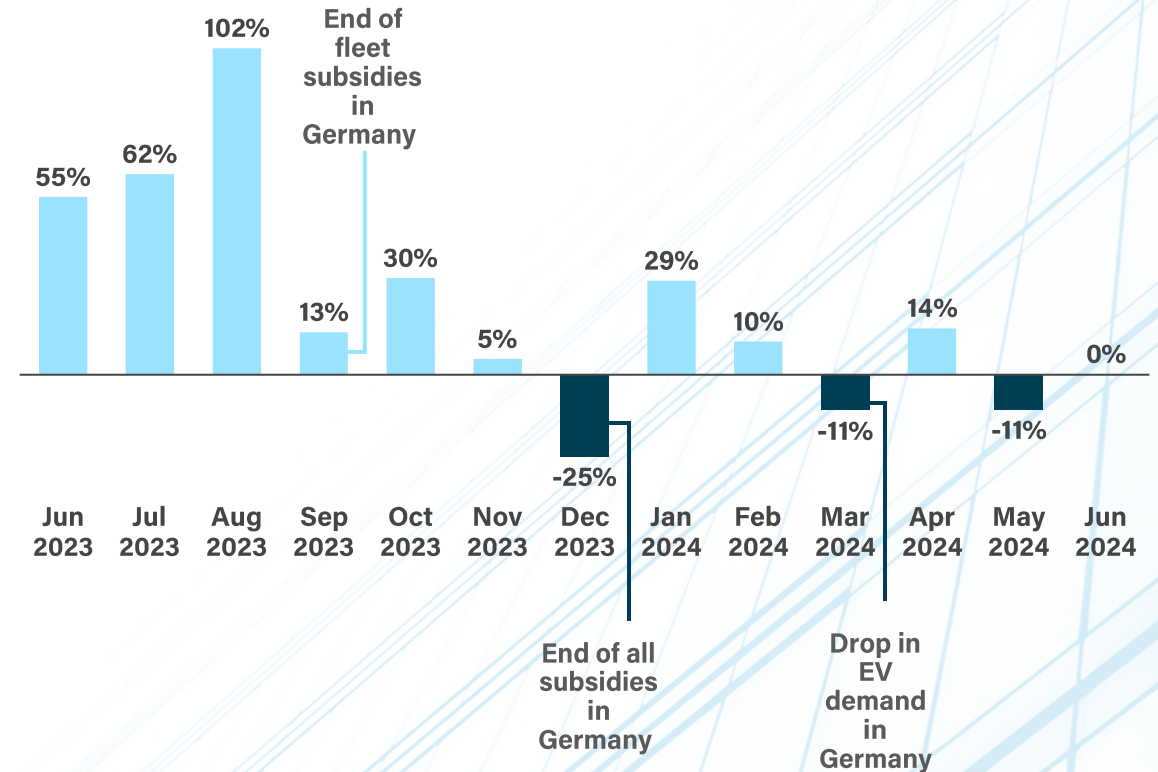
ULTIMATE GOAL OF THE MANDATE

If no changes are made to the mandate, the ultimate goal is to achieve a 100% reduction in average emissions for cars and vans by 2035, **with interim targets of 15% by 2025 and 55% by 2030 for cars, and 50% by 2030 for vans, compared to 2021 levels**

EARLY 2024 EV SALES FALTER DUE TO INADEQUATE INCENTIVES, HIGH PRICES, AND INCONVENIENT INFRASTRUCTURE, POSING CHALLENGES TO THE REGION'S TRANSITION

- Despite the ambitious goal to fully transition to electric vehicles (EVs) by 2035, EV sales growth began fluctuating and stalling in September 2023
- The decline in YoY EV growth coincides with **the removal of subsidies and buying incentives** in several European countries, particularly Germany
- In the first half of 2024, new car registrations across Europe saw a **modest increase of 4.5%**, driven largely by hybrid vehicles
- In fact, although sales of non-plug-in hybrid vehicles surged by 21%, **EVs saw only a modest increase of 1.6%**, making up 14.4% of the EU car market (down from 15.1% the previous year)
- **Without subsidies, EVs remain too costly for many drivers**, with higher insurance and repair costs than combustion-engine cars.
- Additionally, **limited charging infrastructure** is also hindering potential buyers from opting for EVs

NEW EV CAR REGISTRATIONS YOY GROWTH RATE*



*Includes EU, UK and European Free Trade Association (EFTA) countries
Source: European Automobile Manufacturers Association, Press Search

EVS IN EUROPE REMAIN COSTLY AND INACCESSIBLE TO MANY EUROPEANS, PRIMARILY DUE TO AUTOMAKERS' FOCUS ON SUVs, EXPENSIVE EU-MADE BATTERIES, AND REDUCED SUBSIDIES

Despite the EU's progress in reducing emissions, there's a notable absence of initiatives aimed at improving the affordability of electric cars for European consumers. With such high prices, European EVs are inaccessible to citizens, especially in Central, Eastern, and Southern Europe, where the average net income is EUR 13,000. Several successive events in the market have contributed to higher prices, including

1 SUBSIDIES REMOVAL



- Reduced subsidies have been **the biggest trigger for the slowing demand for EVs**
- **Germany's subsidy program ending in 2023**, caused a 50% drop in December EV sales
- **Sweden** also saw a decline in EV sales after **cutting incentives and reducing fuel taxes**
- Meanwhile, **Italy's introduction of grants in June 2024** for low-income families doubled its sales

2 FOCUS ON SUV AND TOP TIER CARS



- **Market uncertainties, along with meeting the 2025 CO2 targets**, are driving carmakers to prioritize short-term profits by selling high-margin EVs
- This disproportionate focus resulted in **high prices for EVs in Europe**, lowering sales
- **Only 17% of EVs sold in Europe are affordable**, compared to 37% of combustion engines
- Currently, Europe has **only one EV model under EUR 20,000**, whereas China offers 75

3 EXPENSIVE LOCAL BATTERIES

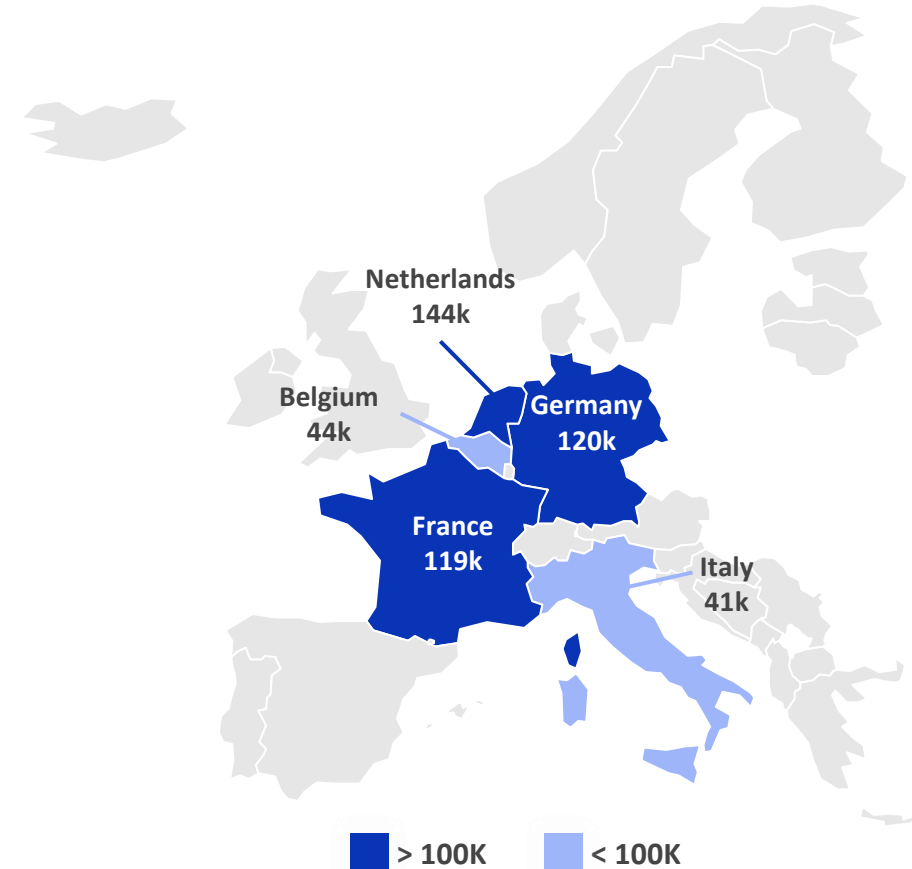


- **EU-made batteries remain much more expensive than planned**, making EVs unaffordable for many despite public support
- Currently, **battery costs are about half of an EV's price**, with European EVs often over EUR 30,000 and batteries around EUR 15,000
- The **2035 ban on combustion cars and the expected rise in EV demand** are projected to **increase lithium battery costs** even further

EUROPE'S INADEQUATE EV INFRASTRUCTURE AND ITS UNEVEN DISTRIBUTION POSES A SIGNIFICANT BARRIER TO FOSTERING WIDESPREAD EV ADOPTION

- **Insufficient access to charging infrastructure** further widens market disparities across EU regions
- With only about **630,000** charging stations, **far below the 3.5 million needed by 2030**, access to charging points varies widely across EU regions
- **The Netherlands, France, and Germany** host **61% of EU charging points**, covering just over 20% of the EU, leaving 39% scattered across 24 countries
- To meet the 55% CO² reduction target for cars and vans by 2030, **22,000 public charging points would need to be installed weekly**
- **Lengthy permitting processes and the need for substantial grid upgrades**, requiring a EUR 240 billion investment by 2030, further slow progress

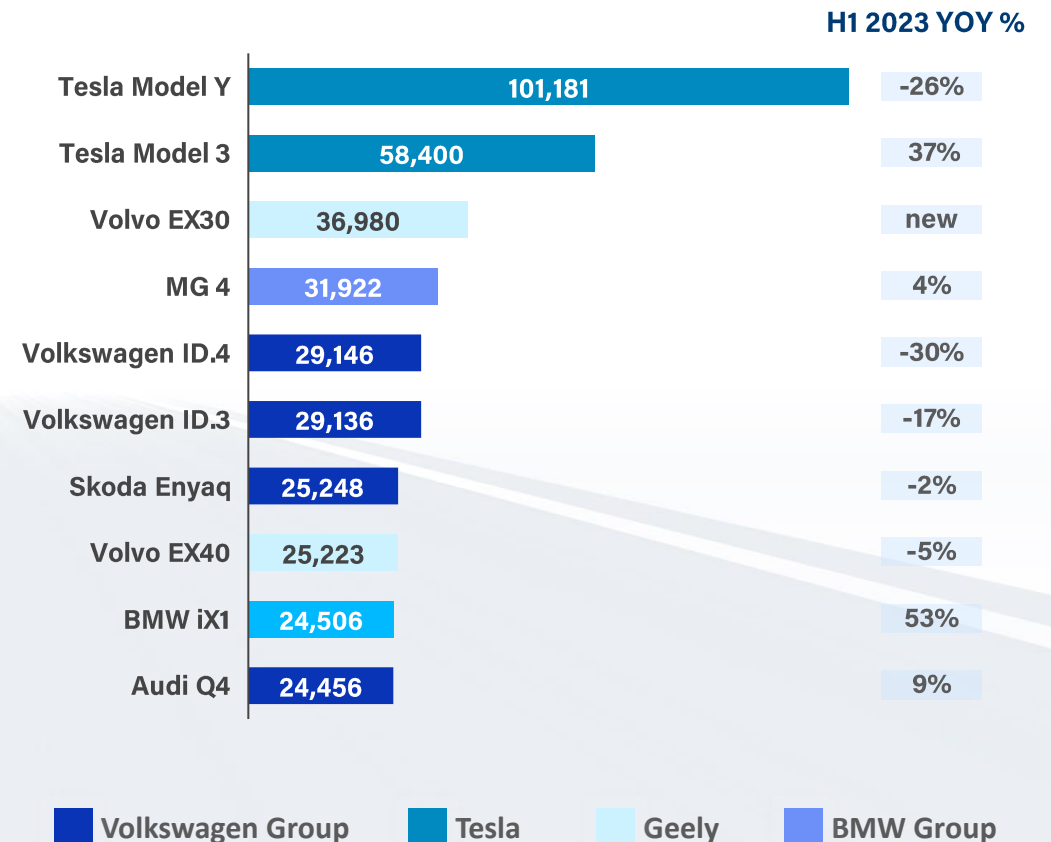
TOP 5 COUNTRIES WITH THE MOST PUBLIC CHARGING POINTS IN THE EU



WHILE EUROPEAN OEMS EXPERIENCED MIXED RESULTS DUE TO THE FALTERING EUROPEAN EV MARKET, CHINESE AUTOMAKERS SAW SIGNIFICANT GROWTH IN THE FIRST HALF OF 2024

- The slowing demand is also affecting several European automakers. In fact, while Volkswagen Group led the European BEV market with 178,000 units sold in H1 2024, it has recorded a **14% yoy decline**
- On the other hand, **BMW Group's** BEV market share rose to **nearly 10% from 7.5% the previous year**, thanks to strong performances from models like the BMW iX1, i4, i5, and iX2
- Meanwhile, **Chinese major automakers grew impressively** in the European market. Geely Group **increased BEV registrations by 52%**, surpassing European OEMs like Mercedes and Renault Group
- Other Chinese automakers also are **rapidly entering the market**, with Xpeng's registrations rising to 2,214 units from 51 and ZEEKR registering 821 units from none

BEV CARS REGISTRATIONS BY TYPE FOR H1 2024 AND YOY GROWTH



DUE TO THE LOWER EV DEMAND, SEVERAL EUROPEAN OEMS ARE ALTERING EV PRODUCTION PLANS, REASSESSING BATTERY NEEDS, AND EXTENDING COMBUSTION-ENGINE MODEL LIFESPANS

Several OEMs in Europe are responding to lower-than-expected EV demand by adjusting production plans, reassessing battery capacity needs, and extending the life of combustion-engine models. These measures include production cuts, cancellations, factory closures, and strategic delays in expanding EV infrastructure:

VOLKSWAGEN (VW)



- Volkswagen has **cancelled** its plans to **manufacture the all-electric ID.3** at its primary plant in Wolfsburg, Germany
- **Volkswagen may close the Brussels Audi factory**, potentially costing around USD 2.8 billion in 2024
- Due to low sales, **Audi may discontinue the production of the Q8 e-tron SUV** earlier than planned

MERCEDES-BENZ



- Mercedes-Benz will **continue producing the A-Class until 2026** instead of a previous plan to axe the gas-powered compact in 2024
- Mercedes-Benz will **delay adding more battery cell capacity until EV demand increases**, no longer expecting to need the planned 200 gigawatt-hours by 2030

STELLANTIS



- Stellantis will **prolong reduced operations at its Mirafiori complex in Italy** due to weak demand for the full-electric Fiat New 500 and Maserati models
- Fiat plans to **reintroduce a petrol version of its 500-city car**, called the Fiat 500 Ibrida

FORD MOTOR



- Ford has **dropped its plan to go all-electric in Europe by 2030** due to lower-than-expected EV demand
- The company is **reducing EV investment** from USD 10 billion to USD 8 - 9 billion due to EV sector losses and changing demand
- Ford is **cutting production of the electric F-150 Lightning**

IN RESPONSE TO LOWER EV DEMAND AND PRODUCTION CUTBACKS, SOME EU GOVERNMENTS ARE ENFORCING STRICTER EV QUOTAS AND INTRODUCING BUYING INCENTIVES TO REACH THEIR 2035 GOAL

THE MANDATE TO BAN COMBUSTION CARS BY 2035

- To achieve climate neutrality by 2050, the EU is ambitiously tightening CO2 emission standards by mandating a ban on new sales of combustion engine vehicles starting in 2035

CURRENT STATE OF THE EV MARKET IN EUROPE

- The current demand for electric vehicles (EVs) does not support this desired transition. The growth in EV demand has notably declined, with EVs constituting only a modest portion of the market.
- Meanwhile, Chinese automakers are making significant inroads into the European market, outpacing some European OEMs

CHALLENGES AFFECTING THE EUROPEAN EV MARKET

- The growth in EV demand has notably declined due to a drop in subsidies, high prices, and inadequate recharging infrastructure
- Due to reduced subsidies, the focus of OEMs on high-end EVs, and the high cost of domestically produced batteries, European drivers find EVs unaffordable and inaccessible

OEMs RESPONSE TO THE STALLING EV DEMAND

- In response to the low EV demand, European OEMs are revising their strategies to limit losses, such as production cuts, reassessment of battery needs, and extending the lifespan of combustion-engine models. For example, Volkswagen has canceled plans for new EV models at its primary plant

GOVERNMENT INCENTIVES TO PUSH THE EV TRANSITION

- To address these challenges, the EU and its member states have introduced strict EV quotas and buying incentives, such as the UK's 22% electric sales requirement and Italy's significant incentives for low-income EV buyers.
- Additionally, the EU has imposed tariffs up to 37.6% on Chinese EV imports, citing "unfair subsidization" that allows these EVs to be sold at much lower prices and therefore threatens market stability
- While some of these initiatives can help the EU reach its 2035 goal, **the tariffs on Chinese EVs could lead to higher prices for consumers and affect the pace of the shift away from combustion engines**

Contact us to learn more about the ongoing EV competition between Europe, the US, and China

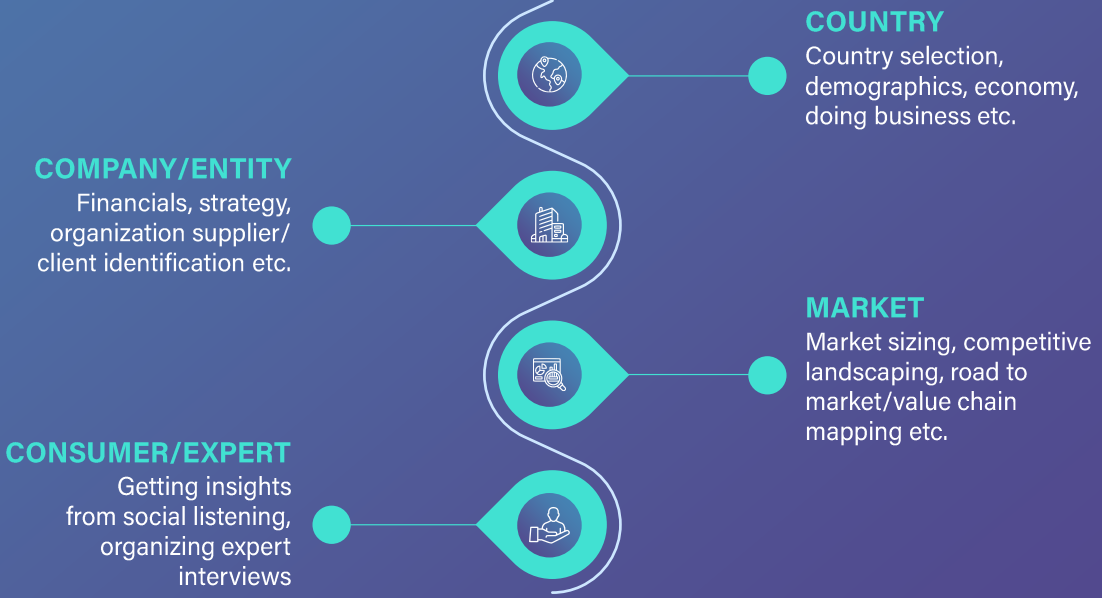
infomineo
BRAINSHORING SERVICES

ABOUT US



OUR RESEARCH SERVICES

FOUR LEVELS OF RESEARCH



THREE TYPES OF SUPPORT



COMBINATION OF APPROACHES



WHAT MAKES US DIFFERENT



HIGH-QUALITY IMPACTFUL INSIGHT

Consistently deliver high-quality insights, through a fully customizable process



THOUGHT PARTNERSHIP

Our commitment extends beyond tasks, providing continuous value towards a thought partnership at every phase



STREAMLINED PROCESS INTEGRATION

Our multilingual team seamlessly integrates into your processes, serving as a direct extension of your team

INFOMINEO ACROSS THE GLOBE



5 OFFICES

NEW OFFICE IN
+ KUALA LUMPUR
COMING SOON...



+350
EMPLOYEES



25
NATIONALITIES



+80% OF OUR BUSINESS
ON A RETAINER BASIS

GET IN TOUCH TODAY

Our team of **300+ Infomineons** worldwide is committed to helping you reach your objectives.

With a track record of over 200 satisfied clients, we are confident in our ability to adapt to your unique needs, seamlessly integrate with your operations and ultimately overachieve your expectations.



CONTACT US





infomineo

BRAINSHORING SERVICES