

National Idling Reduction Network News

November 2013

SOLICITATIONS FOR FUNDING AND AWARDS

[Brown text indicates a new entry since last month.]

ORGANIZATION	PROJECT	FUNDING	DEADLINE	WEBSITE
Bay Area Air Quality Management District (BAAQMD)	Carl Moyer Memorial Air Quality Standards Attainment Program	~\$15 million	First come, first served.	baaqmd.gov/?sc_itemid=08F9594F-BF34-4A2A-BD38-9A3D0CCFF8F8
Colorado Regional Air Quality Council	Clean Air Fleets (GPS and retrofit technologies to support idle reduction in the Denver Metro area and Colorado Front Range)	~\$1 million	First come, first served.	Kate Ruygrok, 303-629 5450, ext. 290, or cleanairfleets.org
New York State Energy Research and Development Authority (NYSERDA)	New York State Electric Vehicle Voucher Incentive Fund (NYSEV-VIF)	\$9 million	First come, first served.	truck-vip.ny.gov/about.php
Arkansas Department of Environmental Quality	Business Assistance Program, Environmental Loans for Small Businesses	Indeterminate	Rolling deadline until funds are awarded.	adeq.state.ar.us/poa/sba/envloans.htm
California Air Resources Board (CARB)	On-Road Heavy-Duty Vehicle Loan Program	~\$48 million for loan guarantees	Rolling deadline until funds are awarded.	arb.ca.gov/ba/loan/on-road/documents/hdvloanprogram.pdf
Illinois Environmental Protection Agency (EPA)	Illinois Clean Diesel Grant Program	\$294,517	Rolling deadline until funds are awarded.	illinoisgreenfleets.org/
Illinois EPA	Illinois Clean Diesel Grant Program—school buses only	\$1 million annually through 2016	Rolling deadline until funds are awarded.	illinoisgreenfleets.org/
Metropolitan Washington Council of Governments (COG), in collaboration with the District Department of the Environment, the District Department of Transportation, and the Maryland Department of the Environment	Driver Recognition Program—Diesel Idle Reduction Campaign	Not applicable	Rolling deadline—the 15th of every month.	turnyourengineoff.org/campaign_recognition.html

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Minnesota Pollution Control Agency (MPCA)	Small Business APU (auxiliary power unit) Loan Program	\$110,000	Rolling deadline until funds are awarded.	pca.state.mn.us/index.php/topics/small-business-environmental-assistance-program/small-business-ombudsman/small-business-environmental-improvement-loan-program.html
San Joaquin Valley Air Pollution Control District (SJVAPCD)	SJVAPCD Hybrid Truck and Bus Voucher Incentive Project (HVIP) Plus-up Voucher Funding Program	~\$978,000	Rolling deadline until funds are awarded.	californiahvip.org/
Pennsylvania Department of Environmental Protection	Small Business Pollution Prevention Assistance Account Loan Program	\$2 million annually	Not applicable	portal.state.pa.us/portal/server.pt?open=514&objID=553247&mode=2
San Diego County Air Pollution Control District (APCD)	Proposition 1B: Goods Movement Emission Reduction Program	~\$6 million	Accepting applications for backup projects through December 12, 2013	sdapcd.org/homepage/grants/grants.html
U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE)	Small Business Innovation Research (SBIR) and Technology Transfer (STTR) Program, Grants for Clean Energy Technologies	Not yet available	Letter of Intent, December 16, 2013; Application, February 4, 2014	energy.gov/eere/articles/energy-department-announces-topics-and-new-approaches-grants-small-businesses-clean
MPCA	Diesel Emissions Reduction Act (DERA) Grant Program	\$120,000	December 16, 2013	pca.state.mn.us/wfhy4c4
NYSERDA	New York State Clean Air School Bus Program, Round 3	<\$1.7 million	December 30, 2013	nyscrda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities/PON-1896-New-York-State-Clean-Air-School-Bus-Program.aspx
California Energy Commission	Federal Cost-Share for Emerging Technologies, Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)	~\$2.2 million	January 10, 2014	energy.ca.gov/contracts/PON-13-604/
North Carolina Department of Environment and Natural Resources (NCDENR), Division of Air Quality	APU/Idle Reduction Device Rebate Program	~\$80,000	First-come, first served, as long as funds remain but no later than September 30, 2014	daq.state.nc.us/motor/Rebates/

REGULATORY NEWS

Granbury Joins Texas Communities That Restrict Idling

The City of Granbury, Texas, has joined 28 of its neighbors in the enforcement of the Texas Commission on Environmental Quality's (TCEQ) idling restriction. TCEQ's rule, which applies to communities that have signed a Memorandum of Agreement with the TCEQ, prohibits vehicles with a gross vehicle weight (GVW) of more than 14,000 lb from idling for more than 5 minutes. There are numerous exceptions, including vehicles equipped with a 2008 or newer engine that has been certified to emit no more than 30 grams of nitrogen oxides per hour when idling.

In North Central Texas, where 10 counties are in nonattainment for federal ozone standards, the reduction of heavy-duty vehicle idling is among the measures to reduce ozone and other harmful pollution. In the Dallas-Fort Worth 8-Hour Ozone Attainment Demonstration State Implementation Plan (SIP), locally enforced idling restrictions are included as "weight of evidence."

For more information about the TCEQ idling rule and a list of the counties and municipalities that adhere to it, please go to nctcog.org/trans/air/programs/idling/engineoffnorthtexas/drivers.asp.

AWARDS AND RECOGNITION

RECIPIENT	SOURCE OF FUNDING	PURPOSE OF GRANT	FUNDING
Duke Energy (Charlotte, North Carolina)	North Carolina Solar Center (Clean Fuel Advanced Technology [CFAT] Awards)	Purchase of Railserve LEAF Gen-Set Tier III locomotive	\$200,000
Town of Cary, North Carolina	North Carolina Solar Center (CFAT Awards)	Installation of idle reduction equipment on 22 vehicles and telematics equipment on 57 vehicles for the town's fleet	\$121,779
Idle-Free VT	Vermont Department of Health, Vermont Asthma Program	Implementation of School No Idling Policies (SNIP), a program designed to increase the number of schools adopting no-idling policies	\$7,500
Plug Power (Latham, New York)	NYSERDA	Demonstration of the viability of replacing diesel generators with hydrogen fuel cells for powering transport refrigeration units (TRUs)	\$500,000
Snohomish County Fire District 7 (Snohomish, Washington)	Washington State Department of Ecology and the Puget Sound Clean Air Agency	Battery- and generator-based idle reduction systems for 2 fire engines and 3 emergency medical response units	~\$83,000
Zanesville City School District (Zanesville, Ohio)	Ohio EPA	Installation of diesel oxidation catalysts and anti-idling equipment on 21 school buses and emission reduction equipment on 10 school buses	\$62,298

REPORTS AND OTHER RESOURCES OF INTEREST

SOURCE	TITLE	WEBSITE OR CONTACT
Argonne National Laboratory	Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool	greet.es.anl.gov/afleet
CARB	Carl Moyer Program Guidelines [updated]	arb.ca.gov/msprog/moyer/guidelines/current.htm
Frost and Sullivan	Strategic Analysis of Global Hybrid and Electric Heavy-Duty Transit Bus Market	Summary and table of contents available at frost.com/prod/servlet/report-brochure.pag?id=NC7C-01-00-00-00
North American Council for Freight Efficiency (NACFE)	Trucking Efficiency – Anti Idling Technology Overview	nacfe.org/wp-content/uploads/2013/08/Trucking-Efficiency-Anti-Idling-Tech-Overview-072413.pdf
Navigant Research	Advanced Electric Forklift Technologies in North America	Summary and table of contents available at navigantresearch.com/research/advanced-electric-forklift-technologies-in-north-america
WTAQ	Truckers, State Benefit from Diesel Idling Reduction Grants (podcast)	media.mwcradio.com/podcasts/newsmaker-interviews/087/newsmaker-interviews-087.mp3

UPCOMING MEETINGS AND EVENTS

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MEETING	LOCATION	DATE	WEBSITE OR CONTACT
CARB Truck and Bus Regulation Workshops	Sacramento, California—December 4, 2013 (also webcast) Redding, California—December 5, 2013 San Diego, California—December 10, 2013 Fresno, California—December 12, 2013		arb.ca.gov/dieseltruck
CARB Public Hearing To Consider Proposals Related to On-Road Medium- and Heavy-Duty Vehicles and Engines	Sacramento, California	December 12, 2013	arb.ca.gov/lispub/rss/displaypost.php?pno=7108
New York Clean Truck Incentives Webinar	Webinar	December 12, 2013	truck-vip.ny.gov/index.php
TCEQ Public Hearing on Proposed Revisions to the Texas Emissions Reduction Plan (TERP) Rule	Austin, Texas	December 12, 2013	tceq.texas.gov/rules/prop.html

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MEETING	LOCATION	DATE	WEBSITE OR CONTACT
CARB Course 520: How To Comply with CARB Diesel Regulations	Webinar	December 18, 2013	arb.ca.gov/training/courses.php?course=520 (link also shows multiple onsite classes on various dates and in multiple locations)
2014 TRB 93rd Annual Meeting	Washington, D.C.	January 12–16, 2014	trb.org/AnnualMeeting2014/AnnualMeeting2014.aspx
SAE Government/Industry Meeting (in conjunction with the Washington, D.C., Auto Show)	Washington, D.C.	January 22–24, 2014	sae.org/events/gim/
Midwest Truck and Trailer Show	Peoria, Illinois	January 31–February 1, 2014	midwesttruckshow.com/
Green Truck Summit	Indianapolis, Indiana	March 4–5, 2014	ntea.com/greentrucksummit/about/
NTEA Work Truck Show	Indianapolis, Indiana	March 4–7, 2014	ntea.com/worktruckshow/index.aspx?id=938
Mid-America Trucking Show	Louisville, Kentucky	March 27–29, 2014	truckingshow.com/
National Association of Fleet Administrators (NAFA) Institute and Expo	Minneapolis, Minnesota	April 8–11, 2014	nafainstitute.org/
Northeast Regional High-Efficiency Truck Users Forum (HTUF) Fleet Workshop and Ride and Drive	New York City, New York	March 16, 2014	calstart.org/Events/CALSTART-Events.aspx
Alternative Clean Transportation (ACT) Expo	Long Beach, California	May 5–9, 2014	actexpo.com/index.html
Government Fleet Expo & Conference (GFX)	San Diego, California	June 2–4, 2014	governmentfleetexpo.com/
2014 U.S. DOE Vehicle Technologies Office Annual Merit Review and Peer Evaluation	Washington, D.C.	June 16–20, 2014	eere.energy.gov/vehiclesandfuels/events/events_detail.html?event_id=7447
Society of Automotive Engineers (SAE) 2014 Commercial Vehicle Engineering Congress	Rosemont, Illinois	October 7–9, 2014	sae.org/events/cve/
Green Fleet Conference and Expo	Schaumburg, Illinois	October 29–30, 2014	greenfleetconference.com/

MANUFACTURERS' NEWS

ESW: Engine Coolant Heater Reduces Engine Emissions

ESW America, Inc. (Montgomeryville, Pennsylvania), an emissions-testing company, recently measured the effects of the use of a Webasto Thermo Top C 5-kW coolant heater on the emissions of a 2005 diesel engine.

ESW staff collected and analyzed data on the International DT-466 engine using a dynamometer. The emissions data for engine start-up temperatures of 40°F, 75°F, and 155°F showed that the engine prewarmed to 155°F reduced start-up emissions as follows:

- Nitrogen oxide (NOx) emissions were reduced by 40%.
- Particulate matter (PM) emissions were reduced by 27% compared

to a 75°F start, and 66% compared to a 40°F start. (Less PM extends the time between diesel particulate filter regenerations or changes, saving time and cost.)

- Carbon monoxide (CO) was reduced by 29% for a 40°F start and 62% for a 75°F start.
- There was no significant effect on hydrocarbon emissions.

To read more about the emissions measurements, please go to eswgroup.com/webasto-releases-test-results-indicating-pre-heated-engines-reduce-emissions-and-improve-dpf-performance/.

Thermo King Increases TriPac Evolution Maintenance Interval

APU manufacturer Thermo King is now offering a 2,000-hour maintenance interval, up from 1,500 hours, on all TriPac Evolution APUs, including those previously purchased. According to the company, the extended maintenance interval reduces costs and better aligns with tractor maintenance cycles, reducing downtime.

The TriPac Evolution, launched earlier this year, is EPA Tier IV compliant and

provides truck cab/sleeper compartment climate control, engine preheating, battery charging, and electric power. For more information, please go to truckinginfo.com/channel/products/product/detail/2013/11/thermo-king-s-tripac-evolution-features-2-000-hou.aspx and na.thermoking.com/content/dam/tki-na/pdf/brochures/apu/forms_55719-19-PL_4-13_LR.pdf.

PORTS

Port of Oakland: Shore Power Infrastructure Complete

The Port of Oakland has completed the installation of its shore-power infrastructure. Shore power, sometimes called cold ironing, enables ships

at berth to turn off their auxiliary diesel engines and plug in for electrical power, markedly reducing emissions at ports.

According to the Port's *2012 Seaport Air Emissions Inventory*, the Port of Oakland has reduced its diesel particulate emissions by 70% since 2005. With the completion of the shore-power infrastructure, the Port expects "to knock another 11 tons of diesel particulate matter out of the air," said Port Board Second Vice-President Earl S. Hamlin.

The estimated project cost is approximately \$70 million, about \$10 million of which was covered by the private sector. Beginning on January 1, 2014, operators of container, passenger, and refrigerated cargo vessels visiting California ports more than 25 times a year will be required to use shore power.

For more information, please see portofoakland.com/newsroom/pressReleases/2013/pr_319.aspx and portofoakland.com/pdf/newsroom/pressrel_319.pdf.

(Photo: Demonstration of components of the plug-in equipment at a November 8, 2013, press conference on the completion of the Port's shore-power infrastructure. Photo courtesy of Kelly Patrick Dugan and the Port of Oakland.)



OTHER NEWS OF INTEREST

Study Quantifies Air-Quality Benefits of School Anti-Idling Campaigns

In a Cincinnati-based study, investigators sought to measure the air-quality impacts of an anti-idling campaign at four schools. The campaign, which sought to reduce idling by school-bus drivers and parents dropping off or picking up their children, included:

- An educational program for school-bus drivers and parents, followed by an anti-idling pledge;
- Anti-idling signs near school drop-off and pick-up zones;
- Student and staff assemblies about air quality;

- A student-led movie; and
- Monitoring of idling activity.

Investigators collected outdoor air-quality samples before and after the campaign to measure particulate matter (PM_{2.5}), elemental carbon (EC), and particle number concentration (PNC). Before the campaign, the air-quality measurements exceeded community background levels at three of the four schools. Following the campaign, at the school with the most buses (39), background levels of PM_{2.5} had decreased 76% and EC had decreased 63%.

Patrick Ryan, the study's lead author, said, "The results of this study demonstrate, for the first time, that not idling is a simple and effective policy that can improve air quality at schools, especially schools with a large number of buses."

The study involved Cincinnati Children's Hospital, Cincinnati Public Schools, the Cincinnati Health Department, and the University of Cincinnati

Department of Environmental Health. *Environmental Science: Processes & Impacts* will publish the study early next year. (The abstract is available at pubs.rsc.org/en/content/articlelanding/2013/em/c3em00377a#!divAbstract.) For more information, please see cincinnatichildrens.org/news/release/2013/community-campaign-reduces-air-pollution-10-8-2013/.

Documentary *Idle Threat* and Companion Children's Book Available

"Excuse me for bothering you, but are you aware that it's against the law to idle your car engine for more than 3 minutes?"

That's how New York City's anti-idling crusader, George Pakenham, has approached thousands of idling motorists over the years. His story, captured in his 2012 documentary, *Idle Threat*, is now available on DVD. A companion

children's book, *Big Nose, Big City*, about a dog's experience of city smells—good and bad—is also available. For more information, please go to idlethreatmovie.com/. A recent interview with Mr. Pakenham is available at pittsburgh.cbslocal.com/video?autoStart=true&topVideoCatNo=default&clipId=9550308.

RECURRING FEATURES

Currently Available Idling Reduction Equipment

The Alternative Fuels Data Center (AFDC) of the DOE's Office of Energy Efficiency and Renewable Energy (EERE) identifies types of heavy-duty idling reduction equipment and provides links to some manufacturers at afdc.energy.gov/afdc/vehicles/idle_reduction_equipment.html and

afdc.energy.gov/consERVE/idle_reduction_related.html. For EPA-verified idling reduction technologies in eight categories, please visit EPA's SmartWay Transport website at epa.gov/smartway/technology/idling.htm.

Status of the Weight Exemption for Idling Reduction Devices

[Ed. note: The Energy Policy Act of 2005 allowed for a national 400-pound exemption for the additional weight of idling reduction technology on heavy-duty vehicles. On October 1, 2012, Moving Ahead for Progress in the 21st Century (MAP-21) became law, increasing this weight allowance from 400 lb to 550 lb. Each state can adopt this exemption, at its own discretion. If you have information about planned or enacted changes, please send a

message to IDLINGREDUCTION@ANL.GOV so that we may share the news with our readers.]

We will update the following table as we become aware of changes. As time permits, we will provide URLs so that interested parties, such as trucking companies, can work with their state trucking associations to be sure that enforcement officials are aware of changes in the laws.

State Recognition of the Auxiliary Power Unit Weight Exemption to GVW Limit: 23 CFR 658.17(n)						
Alabama	<i>District of Columbia</i>	Kansas	Mississippi	New York	South Carolina	West Virginia
Alaska	Florida	<i>Kentucky</i>	MISSOURI	<i>North Carolina</i>	South Dakota	Wisconsin
Arizona	Georgia	Louisiana	Montana	North Dakota	TENNESSEE	Wyoming
Arkansas	<i>Hawaii</i>	Maine	Nebraska	Ohio	Texas	
<i>California</i>	Idaho	Maryland	Nevada	Oklahoma	Utah	
COLORADO	Illinois	Massachusetts	NEW HAMPSHIRE	Oregon	Vermont	
CONNECTICUT	Indiana	Michigan	New Jersey	Pennsylvania	VIRGINIA	
Delaware	Iowa	MINNESOTA	New Mexico	<i>Rhode Island</i>	Washington	
Legend: Allows a 400-lb exemption by law; <i>ALLOWS A 550-LB EXEMPTION BY LAW</i> ; Allows a 400-lb exemption by enforcement policy rather than by law; <i>Does not permit an APU weight exemption.</i>						

Summary of State and Municipal Idling Regulations

Many states and municipalities restrict idling. The recently launched IdleBase (cleancities.energy.gov/IdleBase) contains information about laws for all classes of on-road vehicles. For laws specific to heavy-duty vehicles only, the American Transportation Research Institute (ATRI) has an excellent

resource (atri-online.org/2013/02/20/idling-regulations-compendium/). If your state, county, or municipality has made or is proposing changes, please let us know (IDLINGREDUCTION@ANL.GOV) so that we may share the information with newsletter readers.

Incentives and Funding Opportunities for Idling Reduction Projects

The DOE Clean Cities initiative provides a listing of federal and state programs that offer incentives and funding for idling reduction projects. Information can be found at afdc.energy.gov/laws/. Let us know if any information needs to be changed or updated. Additionally, the U.S. EPA Diesel Collaboratives offer news of available grant and loan programs. For the Northeast Diesel Collaborative (Regions 1 and 2), see northeastdiesel.org/funding.html; Mid-Atlantic Diesel Collaborative

(Region 3), dieselmidatlantic.org/funding-opportunities; Southeast Diesel Collaborative (Region 4), southeastdiesel.org/; Midwest Clean Diesel Initiative (Region 5), epa.gov/midwestcleandiesel/grants/index.html; Blue Skyways Collaborative (Regions 6 and 7 plus Minnesota), blueskyways.org/funding/index.html; Rocky Mountain Clean Diesel Collaborative (EPA Region 8), epa.gov/diesel/coll-rocky.htm; and West Coast Collaborative (EPA Regions 9 and 10 plus Canada and Mexico), westcoastcollaborative.org/funding-opportunities.htm.

Tools Available To Calculate the Cost of Idling Reduction Equipment

There are a number of tools available to workplace and truck fleet managers, owner-operators, and locomotive engineers to help determine the costs and benefits of paying for and installing idling reduction equipment. A site from Canada that quantifies the costs of workplace idling

is also included. We provide links to the calculators as tools of possible benefit but have not verified their accuracy. Any new entry this month is shown in brown. If you are aware of other sources of information that may be of possible interest to newsletter readers, please let us know.

- Argonne National Laboratory (transportation.anl.gov/engines/idling.html)—choose a calculator from the right side of the Web page)
- Bergstrom (us.bergstrominc.com/nite-calculate-savings/)
- DOE Clean Cities program (afdc.energy.gov/afdc/prep/)
- Dynasys (dynasysapu.com/savings-calculator)
- Energy Xtreme (energyxtreme.net/idle-reduction/calculator-quote)
- Espar (espar.com/html/service/calculator/calculator.html)
- Hotstart (hotstart.com/fuel-consumption-calculator/)
- Idle Free Systems (idlefreesystems.com/no-idle-elimination-solutions-for-sleepers.html)
- Idle Smart (idlesmart.com/calculator.html)
- Kohler Power Systems (kohlerpower.com/mobile/solutions/apucalculator.htm?sectionNumber=13361&nodeNumber=1&contentNumber=102)

- LifeForce (lifeforceapu.com/files/LifeforceCalculator.xls)
- Natural Resources Canada (oee.nrcan.gc.ca/transportation/tools/calculators/Idling/idlingimpact-workplace.cfm?attr=16)
- Odyssey Battery (odysseybattery.com/fleet.html)
- Thermo King (na.thermoking.com/tk-innovation/global/en/products/apu/tripac-evolution-payback-calculator.html.html)
- Webasto (techwebasto.com/redirect/calculators/heater/heater_fuel_calculator_us.htm)
- ZeroRPM (zerorpm.com/select-calc)

Locations of Electrified Parking Spaces

In collaboration with the U.S. Department of Transportation (DOT), the DOE Clean Cities initiative offers a website showing the locations of public truck stops that have idling reduction facilities for heavy-duty trucks. These facilities are currently available in at least 34 states. AireDock, CabAire, EnviroDock, IdleAir, and Shorepower Technologies installations are listed at afdc.energy.gov/afdc/locator/tse. Another resource is the EPA SmartWay Interactive Activity Map, which features data from SmartWay Partners, National Transportation Idle-Free Corridors, National Clean Diesel Campaign

Retrofit projects, Clean School Bus USA projects, ethanol (E-85) and biodiesel fueling station projects, and other related sources. The maps enable visualization of the locations of specific fuel consumption and pollution reduction projects. The maps also help users locate the nearest electrified truck stop and the nearest public alternative-fuel filling station. For more information, please go to epamap10.epa.gov/website/irim_us_map.asp.

Idling Reduction Outreach Assistance

Is your organization looking for help in reducing idling? Your local Clean Cities coalition can help with the support of IdleBox. IdleBox is an electronic, modular toolkit to help managers of light- and medium-duty fleets save money, support a cleaner environment, and even get a bit of recognition for their efforts. IdleBox includes a variety of tools, such as presentations, fact

sheets, signs, posters, stickers, idling calculators, an idling-regulation database, and technical resources—to help fleets implement idle reduction.

To learn more about IdleBox, contact your local Clean Cities coordinator (afdc.energy.gov/cleancities/coalitions/coalition_contacts.php) or e-mail IdleBox@anl.gov.

How To Find Back Issues of *National Idling Reduction Network News*

All issues of *National Idling Reduction Network News* may be found at eere.energy.gov/vehiclesandfuels/resources/fcvt_national_idling.html. Additionally, the site has a compendium of all previous issues; this PDF file is especially useful for conducting searches of all issues of the newsletter.

Please be mindful that Web links may expire or move over time and that some sources require registration. If you have trouble opening a link, try copying and pasting it, or retyping the URL, in your browser window.

Editor

Terry Levinson, Energetics, Inc., (202) 595-4641, tlevinson@energetics.com

Writer

Patricia Weikersheimer, Argonne National Laboratory, (630) 252-3124, idlingreduction@anl.gov

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